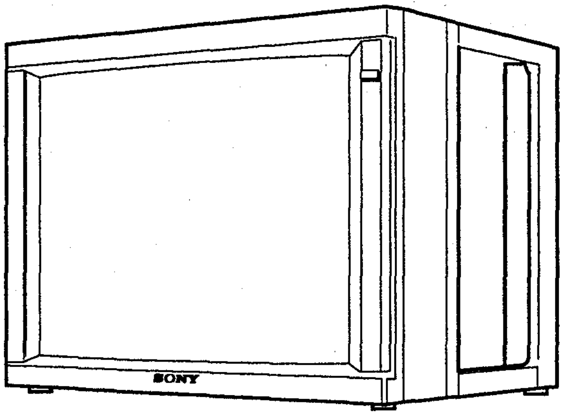
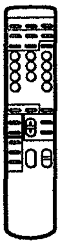
SERVICE MANUAL

MODEL	COMMANDER	DEST.	CHASSIS NO.
PGM-200R1U	RM-921	US Canadian	SCC-F37E-A
PGM-200R1E	RM-921	AEP	SCC-H41B-A
PGM-200R1A	RM-921	Australian	SCC-J77B-A

MODEL	DEST.	CHASSIS NO.
BKM-201SC	US Canadian	SCC-N20A-A
	AEP	SCC-N18A-A
BKM-202FN		
SS-X7A		



PGM-200R1U/200R1E/200R1A



RM-921

TRINITRON® COLOR GRAPHIC MONITOR

SONY

SPECIFICATIONS

PGM-200R1U/200R1E/200R1A

Video signal

Picture tube	29" Super Trinitron tube Visible picture size: 675 mm (27") measured diagonally AG pitch: 0.70 – 0.85 mm Anti-glare and Anti-static
Frequency response	16 MHz (–3 dB)
Scanning frequency	fH 31.5 kHz, fV 60/70 Hz fH 31.25 kHz, fV 50 Hz

Picture performance

Color temperature	9300K (standard)/6500K switchable
Line pull range	Horizontal: ±500 Hz Vertical: –8 Hz
Zooming	Within 5%

Inputs and Outputs

RGB IN (R, G, B)	BNC connector 0.714 Vp-p/non-composite 75-ohm 1 Vp-p/composite 75-ohm
SYNC IN (HD/COMP, VD)	BNC connector H (or composite) SYNC, V SYNC, 1 – 5 Vp-p high impedance
AUDIO IN (L, R)	Phono jack 500 mVrms high impedance
CONTROL S IN	Mini jack 5 Vp-p
RGB OUT (R, G, B)	BNC connector 0.714 Vp-p/non-composite 75-ohm
SYNC OUT (HD/COMP, VD)	BNC connector H (or composite) SYNC, V SYNC, 5 Vp-p high impedance
AUDIO OUT (L, R)	Phono jack Audio gain: ±1.0 dB typical Total harmonic distortion: less than 1%, 500 mVrms
CONTROL S OUT	Mini jack 5 Vp-p
12 V DC OUT	⊖-⊙-⊕ 12 V DC 200 mA max.
EXT SP (External speakers output)	8 – 16 ohms, 7 W + 7 W (when the impedance is 8 ohms)

General

Power requirements	100 – 120 V AC, 50/60 Hz, Max. 3.7 A 220 – 240 V AC, 50/60 Hz, Max.1.2 A
Power consumption	Max. 183W (Max. 208.5W with BKM-201SC)
Operating temperature range	0 – 35°C (32 – 95°F)
Dimensions	687 × 538 × 520 mm (27 ⅛ × 21 ¼ × 20 ½ inches) (w/h/d)
Mass	55 kg (121 lb 4 oz)
Supplied accessories	AC power cord (1) AC plug holder (1) Remote Commander RM-921 with two size AA (R6) batteries (2) Ferrite core (2) Operating instructions (1) Warranty card (1)
Optional accessories	Scan Converter Adaptor BKM-201SC Ventilation Fan Unit BKM-202FN Speaker System SS-X7A

Design and specifications are subject to change without notice.

BKM-201SC

Video processing

Capture range	Horizontal rate: 15.6 to 85 kHz Vertical rate: 50 to 120 Hz
Preset signal	Input: 12 formats (See page 14(EN))
Video memory	1,152 × 1,152 × 24 bits (RGB total)
Sampling rate	14.3 to 40 MHz offset phase max. (equivalent to 80 MHz sampling)
Output pixel clock	25.2 to 38 MHz max.
Max. displayable resolution	640 dots × 480 lines (with PGM-200R1A/200R1E/200R1U)

Inputs and Outputs

RGB1

R (R-Y)/ G (Y)/B (B-Y) IN	BNC-type (×3) 0.714 Vp-p/non-composite 75-ohm (automatic termination) 1 Vp-p/composite 75-ohm (automatic termination)
SYNC IN(HD/COMP, VD)	BNC-type (×2) H (or composite) SYNC, V SYNC, 1 to 5 Vp-p high impedance
AUDIO IN (L, R)	Phono jack (×2) 500 mVrms, high impedance

R (R-Y)/ G (Y)/B (B-Y) OUT	BNC-type (×3) Loop-through
SYNC OUT (HD/COMP, VD)	BNC-type (×2) Loop-through H (or composite) SYNC, V SYNC
AUDIO OUT (L, R)	Phono jack (×2) Loop-through

RGB2

RGB IN	D-sub 15-pin, 3-row See "Pin assignment" on page 25(EN).
AUDIO IN (L, R)	Phono jack (×2) 500 mVrms, high impedance

LINE (NTSC, PAL)

VIDEO IN	BNC-type (×1) Composite video, 1 Vp-p ±2 dB sync negative, 75-ohm (automatic termination)
Y/C IN	Mini DIN 4-pin type (×1) Y (luminance): 1 Vp-p ±2 dB sync negative, 75-ohm (automatic termination) C (chrominance): Burst 0.286 Vp-p ±2 dB (NTSC) 75-ohm (automatic termination) Burst 0.3 Vp-p ±2 dB (PAL) 75-ohm (automatic termination)
AUDIO IN (L, R)	Phono jack (×2) 500 mVrms, high impedance

VIDEO OUT	BNC-type (×1) Loop-through
Y/C OUT	Mini DIN 4-pin type (×1) Loop-through
AUDIO OUT (L, R)	Phono jack (×2) Loop-through

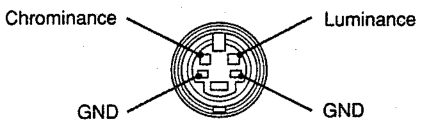
General

Power consumption	25 W
Operating temperature range	0 – 35°C (32 – 95°F)
Dimensions	88 × 439 × 254.6 mm (w/h/d) (3 ½ × 17 ⅜ × 10 ⅛ inches)
Mass	2.35 kg (5 lb 3 oz)
Supplied accessories	Screw +B M4×14 (2) Operating instructions (1) Installation manual for dealers (1)

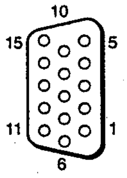
Design and specifications are subject to change without notice.

Pin assignment

Y/C jack (Mini DIN 4-pin)



RGB IN connector (D-sub 15-pin, 3-row)



Pin No.	Signal
1	Red video or R-Y
2	Green video or Y
3	Blue video or B-Y
4	Ground
5	Ground
6	Red ground
7	Green ground
8	Blue ground
9	Not used
10	Ground
11	Ground
12	SDA
13	H sync or composite sync
14	V sync
15	SCL

BKM-202FN

Power requirement	+12 V DC
Power consumption	1.5 W
Operating temperature range	0 to 35°C (32 to 95°F)
Dimensions	Approx. 80 × 80 × 25 mm (w/h/d) (3 1/4 × 1 × 3 1/4 inches)
Mass	Approx. 125 g (4 oz)
Supplied accessories	Screw +RK M3 × 8 (2) Cushion (1) Power cord (1) Operating instructions (1) Installation manual for dealers (1)

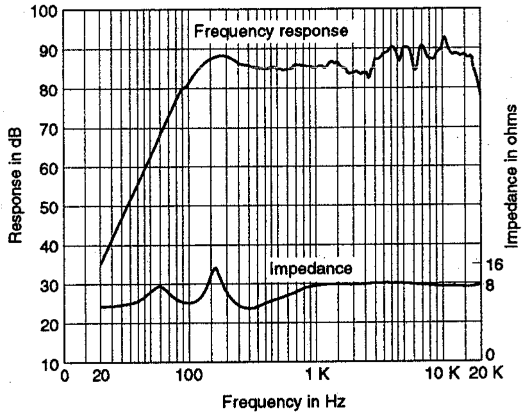
Design and specifications are subject to change without notice.

SS-X7A

Speaker system
2-way speaker system
Speaker units
Corn-type
Woofer: 10 cm (diameter)
Tweeter: 2.8 cm (diameter)
Nominal impedance
8 ohms
Power handling capacity
15 W (nom.)
30 W (max.)
Frequency range
80 to 20,000 Hz
Sensitivity 86 dB (1W, 1 m)
Dimensions Approx. 183 × 280 × 90 mm ($7\frac{1}{4} \times 11\frac{1}{8} \times 3\frac{5}{8}$ inch.) (w/h/d)
Mass Approx. 1.9 kg per speaker (4 lb 3 oz)
Supplied accessories
Speaker cord (2, 2 m)
Angle adjustment screw (4)
Operating instructions (1)

Design and specifications are subject to change without notice.

Characteristic curves



(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RESQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

Section *Title* *Page*

8. DIAGRAMS

8-1. Block Diagrams
- PGM-200R1U/200R1E/200RIA 55
- BKM-201SC 63

8-2. Frame Schematic Diagrams
- PGM-200R1U/200R1E/200RIA 72
- BKM-201SC 75

8-3. Circuit Boards Location 77

8-4. Printed Wiring Boards and Schematic Diagrams 78

(PGM-200R1U/200R1E/200RIA)
- U, UA, H4,H5 Boards 81
- UT (1/2) Board 89
- UT (2/2) Board 92
- H2, H3 Boards 95
- A, A1 Boards 101
- D, DA, V Boards 105
- C Board 109
- G Board 113

(BKM-201SC)
- UJ, B1, H1 Boards 117
- B (1/9) Board 125
- B (2/9) Board 129
- B (3/9) Board 133
- B (4/9) Board 137
- B (5/9) Board 141
- B (6/9) Board 144
- B (7/9) Board 147
- B (8/9) Board 151
- B (9/9) Board 155
- G2 Board 158

8-5. Semiconductors 161

9. EXPLODED VIEWS

PGM-200R1U/200R1E/200R1A

9-1. Rear Cover 165

9-2. Chassis 166

9-3. Picture Tube 167

BKM-201SC

9-4. Chassis 168

10.ELECTRICAL PARTS LIST

- PGM-200R1U/200R1E/200R1A 169
- BKM-201SC 187
- BKM-202FN 203
- SS-X7A 203

TABLE OF CONTENTS

Section *Title* *Page*

1. GENERAL

1-1. PGM-200R1U/200R1E/200R1A
- Warning 9
- Precautions 9
- Features 9
- Location and Function of Parts and Controls 10
- Power Sources 12
- Using On-screen Menus 13
- Operating a Specific Monitor With the Remote Commander 14

1-2. BKM-201SC
Installing 14
Warning 15
Precautions 15
Features 15
Location and Function of Parts and Controls 16
Connection 17
Using On-screen Menus 17
Watching the Picture 19
Adjusting the Picture 21
Zooming, Resizing, and Positioning the Picture 22
Using the Memory 23
Using the Test Pattern 23
Selecting the On-screen Language 24
Using the Remote Commander 24

1-3. BKM-202FN 26

1-4. SS-X7A
- Features 26
- Precautions 26
- Parts Identification 27
- Connecting to the Color Monitor 27
- Installation 27

2. DISASSEMBLY

PGM-200R1U/200R1E/200R1A
2-1. U Board Removal 28
2-2. Rear Cover Assy Removal 28
2-3. Chassis Assy Removal 28
2-4. UA Board Removal 28
2-5. High-Voltage DC Block Removal 29
2-6. G Board and G PC Board Bracket Removal 29
2-7. UT Board Removal 29
2-8. D and A1 Boards Removal 29
2-9. DA, H3 and A Boards Removal 30
2-10. Key Board Unit and H5 Board Removal 30
2-11-1. Harness Location 1 Top View (Right) 30
2-11-2. Harness Location 2 Top View (Left) 30
2-11-3. Harness Location 3 Side View (Right) 31
2-11-4. Harness Location 4 Side View (Left) 31
2-12. Picture Tube Removal 31
BKM-201SC
2-13. Connector Panel A and Lid Case Removal 32
2-14. G2 Board Removal 32
2-15. B Board Removal 32
2-16. H1 Board Removal 32
2-17. Extension Cable 33

3. SET-UP ADJUSTMENTS

3-1. Operating Condition 35
3-2. Preparation for Operation 36
3-3. Adjustment of Y Separation Axis Correction Magnets 36
3-4. Landing Adjustment 37
3-5. Rough Adjustment of Static Convergence 37
3-6. Adjustment of Static Convergence 38
3-7. V-TILT Adjustment 38
3-8. Adjustment of Dynamic Convergence 39
3-9. Focus Adjustment 40
3-10. G2 Adjustment 40
3-11. White Balance Adjustment 40
3-12. Subcontrast Adjustment 41
3-13. Rough Adjustment of Screen Size 41
3-14. Raster Center Adjustment 41
3-15. Confirmation of Service Command 42
3-16. Shipment Setting 42

4. SAFETY RELATED ADJUSTMENTS 43

5. ELECTRIC ADJUSTMENTS IN THE SERVICE MODE 44

6. CIRCUIT ADJUSTMENTS 1 (PGM-200R1 SERIES)

6-1. UT Board Adjustment 46
6-1-1. Oscillator Adjustment 46
6-1-2. Active Out Adjustment 46

7. CIRCUIT ADJUSTMENTS 2 (BKM-201SC)

7-1. Preparation for Adjustment 47
7-2. Adjustment of Respective Signal Levels 50

next page

Section *Title* *Page*

8. DIAGRAMS

8-1. Block Diagrams
- PGM-200R1U/200R1E/200RIA 55
- BKM-201SC 63

8-2. Frame Schematic Diagrams
- PGM-200R1U/200R1E/200RIA 72
- BKM-201SC 75

8-3. Circuit Boards Location 77

8-4. Printed Wiring Boards and Schematic Diagrams 78

(PGM-200R1U/200R1E/200RIA)
- U, UA, H4,H5 Boards 81
- UT (1/2) Board 89
- UT (2/2) Board 92
- H2, H3 Boards 95
- A, A1 Boards 101
- D, DA, V Boards 105
- C Board 109
- G Board 113

(BKM-201SC)
- UJ, B1, H1 Boards 117
- B (1/9) Board 125
- B (2/9) Board 129
- B (3/9) Board 133
- B (4/9) Board 137
- B (5/9) Board 141
- B (6/9) Board 144
- B (7/9) Board 147
- B (8/9) Board 151
- B (9/9) Board 155
- G2 Board 158

8-5. Semiconductors 161

9. EXPLODED VIEWS

PGM-200R1U/200R1E/200R1A

9-1. Rear Cover 165

9-2. Chassis 166

9-3. Picture Tube 167

BKM-201SC

9-4. Chassis 168

10.ELECTRICAL PARTS LIST

- PGM-200R1U/200R1E/200R1A 169
- BKM-201SC 187
- BKM-202FN 203
- SS-X7A 203

SECTION 1
GENERAL

1-1. PGM-200R1U/200R1E/200R1A

WARNING

Owner's Record

The model and serial numbers are located on the rear. Record the model and serial numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No.________ Serial No.________

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

For the customers in the U.S.A.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the customers in Canada

This class A digital apparatus meets all requirements of the Canadian interference-Causing Equipment Regulations.

For PGM-200R1A / 200R1E users

THIS APPARATUS MUST BE EARTHED

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow : **Earth**
Blue : **Neutral**
Brown : ***Live***

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked with the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

The socket-outlet should be installed near the equipment and be easily accessible.

Precautions

On safety

- Operate the unit on 120 V AC (PGM-200R1U) or 220 to 240 V AC (PGM-200R1A/200R1E). Check that VOLTAGE SELECTOR on the rear panel is set to an appropriate position before using the monitor.
- The nameplate indicating operating voltage, power consumption, etc. is located on the rear.
- Should any solid object or liquid fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for several days or more.
- To disconnect the AC power cord, pull it out by grasping the plug. Never pull the cord itself.

On installation

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- When you install the monitor in a poorly ventilated location, we recommend you to use the optional Ventilation Fan Unit BKM-202FN.

On cleaning

To keep the unit looking brand-new, periodically clean it with a mild detergent solution. Never use strong solvents such as thinner or benzine, or abrasive cleansers since these will damage the cabinet. As a safety precaution, unplug the unit before cleaning it.

On repacking

Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it as illustrated on the carton.

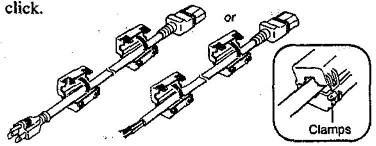
If you have any questions about this unit, contact your authorized Sony dealer.

Note

When you connect a computer to this monitor, attach the supplied ferrite cores. If you do not do this, this monitor will not conform to mandatory FCC/IC/CE (EN55022) standards.

Attaching the ferrite cores

Set the ferrite cores on the both ends of the AC power cord. Close the lid tightly until the clamps click.



The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

Features

Trinitron[1] picture tube

The Trinitron picture tube provides a flat and high resolution picture.

Receivable video modes

No.	Resolution (dots × lines)	Horizontal Frequency	Vertical Frequency	Graphics Mode
1	640 × 480	31.5 kHz	60.0 Hz	VGA[2] (Graphics)
2	720 × 400	31.5 kHz	70.0 Hz	VGA (Text)
3	—	31.25 kHz	50.0 Hz	—

Notes

- The values of No. 1 in the table above are same as the NTSC signal which is doubled for each line to 31.5 kHz horizontal frequency.
- The values of No. 3 in the table above are same as the PAL signal which is doubled for each line to 31.25 kHz horizontal frequency.

ID control

You can operate a specific monitor among several monitors by using the index number features.

On-screen menus

You can adjust the settings by using the on-screen menus.

Control S

The CONTROL S signal allows remote control of several monitors and a VCR through a single monitor.

Warning on power connection

Use a proper power cord for your local power supply.

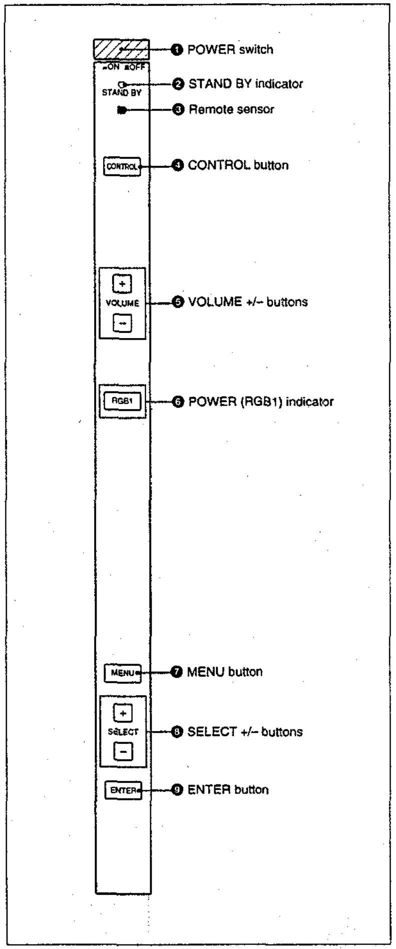
	United States, Canada	Continental Europe		United Kingdom, Ireland, Australia, New Zealand	Japan
Plug type	VM0234S	COX-07	636	—	VM1292
Female end	VM0244S	COX-02	VM0310B	VM0310B	VM1298
Cord type	SJT	H05VV-F		CEE (13) 53rd (O.C)	HVCTF
Minimum cord set rating	10A/125V	10A/250V		10A/250V	7A/120V
Safety approval	UL/CSA	VDE		VDE	DENTORI

---

[1] Trinitron is a registered trademark of Sony corporation.
[2] VGA is a registered trademark of the International Business Machines Corporation, USA.

Location and Function of Parts and Controls

Front Panel


❶ POWER switch
ON OFF
STAND BY
❷ STAND BY indicator
❸ Remote sensor
CONTROL
❹ CONTROL button
VOLUME
❺ VOLUME +/– buttons
RGB1
❻ POWER (RGB1) indicator
MENU
❼ MENU button
SELECT
❽ SELECT +/– buttons
ENTER
❾ ENTER button

❶ POWER switch
Press to turn the monitor on. Press again to turn it off.

❷ STAND BY indicator
Lights up when the monitor is turned off with the Remote Commander.

❸ Remote sensor
Receives the beam from the Remote Commander.

❹ CONTROL button
To operate the buttons on the front panel, first press this button. Then the buttons light up that shows they can be operated. Press again to deactivate them.

❺ VOLUME +/– buttons
Press to obtain the desired volume.

❻ POWER (RGB1) indicator
Lights up when the monitor is turned on.

❼ MENU button
Press to make the menu appear or to go to the following menu.

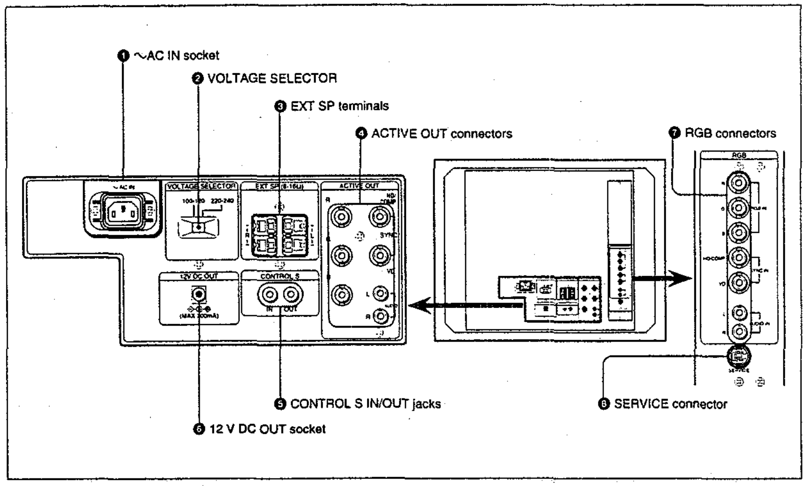
❽ SELECT +/– buttons
Press to move the cursor (▶) to an item or to adjust value in a menu.

❾ ENTER button
Press to select the desired item in a menu.

Notes

- If the picture disappears suddenly and the STANDBY indicator flashes, there may be a failure in the monitor. Unplug the unit and call your authorized Sony dealer.
- There is the DIN 8-pin connector under the cover on the lower-left corner of the front panel.
  This connector is only for qualified personnel.
  Do not remove the cover and the screw.

Rear Panel


❶ ∿AC IN socket
❷ VOLTAGE SELECTOR
❸ EXT SP terminals
❹ ACTIVE OUT connectors
❼ RGB connectors
❺ CONTROL S IN/OUT jacks
❻ 12 V DC OUT socket
❽ SERVICE connector
VOLTAGE SELECTOR
EXT SP
ACTIVE OUT
12V DC OUT
CONTROL S
IN
OUT
RGB

❶ ∿AC IN socket
Connect the supplied AC power cord to this socket and to a wall outlet.

❷ VOLTAGE SELECTOR
Set this selector to an appropriate position according to your local power supply before connecting the supplied AC power cord.

❸ EXT SP (External speakers) terminals
Connect to speakers with 8 to 16 ohms impedance.

Note

Do not connect the speaker's cord to the monitor and to an amplifier simultaneously, or an excessive electric current might flow from the amplifier and damage the monitor.

❹ ACTIVE OUT connectors
These connectors work as output (buffered) connectors of the RGB connectors ❼ when the monitor is connected to a power source regardless of the power status.

R/G/B OUT (BNC-type): Outputs of the RGB IN connectors. Connect to the RGB signal inputs of another monitor.

SYNC HD/COMP OUT (BNC-type): Output of the SYNC IN HD/COMP connector. Connect to the H sync signal or composite sync signal input of another monitor.

SYNC VD OUT (BNC-type): Output of the SYNC IN VD connector. Connect to the V sync signal input of another monitor.

Note

SYNC HD/COMP OUT and SYNC VD OUT are high impedance outputs.
When using these outputs, it is recommended to connect a monitor with high impedance sync input connector, or the picture might disappear because of the sync signal level mismatch.

(Continued)

AUDIO OUT (L/R) (phono type): Outputs of the AUDIO IN jacks. Connect to the audio inputs of another monitor.

❺ CONTROL S IN/OUT jacks
Connect to the CONTROL S jacks of a VCR or several monitors. Then you can control the system with a single Remote Commander.
To control the system by aiming the supplied Remote Commander to the remote sensor of the monitor, connect CONTROL S OUT of the monitor and CONTROL S IN of other equipment.

Note

If you connect CONTROL S IN to the other equipment's CONTROL S OUT jack, you cannot operate the monitor with the supplied Remote Commander.

❻ 12 V DC OUT socket
This socket is only used to supply the power to the optional Ventilation Fan Unit BKM-202FN. Do not connect equipment other than BKM-202FN.

❼ RGB connectors

RGB IN (R/G/B) (BNC-type): Connect to the RGB signal outputs of a computer. This monitor accepts VGA signals of an IBM or compatible system equipped with a VGA.

SYNC IN HD/COMP (BNC-type): Connect to the H sync signal or composite sync signal output of a computer.

SYNC IN VD (BNC-type): Connect to the V sync signal output of a computer.

Note

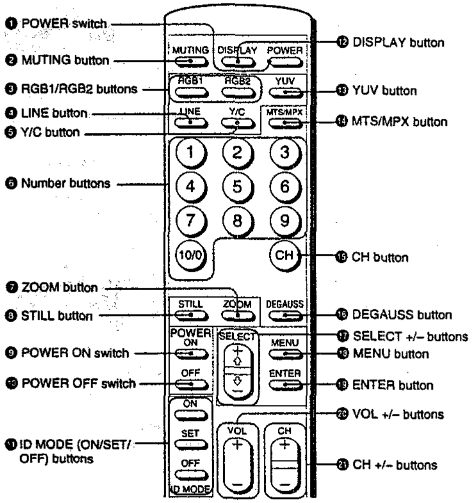
External sync signal is selected automatically. See the priority chart below.

Input connector	**Input sync signals**		
HD/COMP IN	H Sync	Comp Sync	—
VD IN	V Sync	—	—
G(Y) IN	Sync on G	Sync on G	Sync on G
Sync signals to be selected	H Sync V Sync	Comp Sync	Sync on G

AUDIO IN (L/R) (phono type): Connect to the audio output of a computer. Connect to the channel L when the audio signal is monaural.

❽ SERVICE connector (mini DIN 8-pin)
This connector is only for qualified personnel.

Remote Commander


❶ POWER switch
❷ MUTING button
❸ RGB1/RGB2 buttons
❹ LINE button
❺ Y/C button
❻ Number buttons
❼ ZOOM button
❽ STILL button
❾ POWER ON switch
❿ POWER OFF switch
⓫ ID MODE (ON/SET/OFF) buttons
⓬ DISPLAY button
⓭ YUV button
⓮ MTS/MPX button
⓯ CH button
⓰ DEGAUSS button
⓱ SELECT +/– buttons
⓲ MENU button
⓳ ENTER button
⓴ VOL +/– buttons
㉑ CH +/– buttons
MUTING
DISPLAY
POWER
RGB1
RGB2
YUV
LINE
Y/C
MTS/MPX
1
2
3
4
5
6
7
8
9
10/0
CH
STILL
ZOOM
DEGAUSS
POWER ON
OFF
SELECT
MENU
ENTER
ON
SET
OFF
ID MODE
VOL
CH

❶ POWER switch
Press to turn on the monitor. Press again to turn it off.

❷ MUTING button
Press to mute the sound. Press this button again or press the VOL (volume) + button to obtain the sound again.

❸ RGB1/RGB2 buttons
(This button operates only when the Scan Converter Adaptor BKM-201SC is installed into the monitor.)

❹ LINE button
(This button operates only when the Scan Converter Adaptor BKM-201SC is installed into the monitor.)

❺ Y/C button
(This button operates only when the Scan Converter Adaptor BKM-201SC is installed into the monitor.)

❻ Number buttons
Press to select the index number.

❼ ZOOM button
(This button operates only when the Scan Converter Adaptor BKM-201SC is installed into the monitor.)

❽ STILL button
(This button operates only when the Scan Converter Adaptor BKM-201SC is installed into the monitor.)

❾ POWER ON switch
Press to turn on the monitor. When you use multiple monitors, you can use this switch instead of the POWER switch ❶ not to affect another monitor which is already turned on.

(Continued)

❿ POWER OFF switch
Press to turn off the monitor. When you use multiple monitors, you can use this switch instead of the POWER switch ❶ not to affect another monitor which is already turned off.

⓫ ID MODE (ON/SET/OFF) buttons
Press ON to make an index number appear on the screen. Then press the index number of the monitor you want to operate and press SET. After you finish the operation, press OFF to return to the normal mode.

⓬ DISPLAY button
(This button operates only when the Scan Converter Adaptor BKM-201SC is installed into the monitor.)

⓭ YUV button
(This button operates only when the Scan Converter Adaptor BKM-201SC is installed into the monitor.)

⓮ MTS/MPX button
(This button does not operate with the monitor.)

⓯ CH button
(This button does not operate with the monitor.)

⓰ DEGAUSS button
Press to demagnetize the screen. Wait for 10 minutes or more before activating this feature again. The same interval is needed after turning on the monitor.

⓱ SELECT +/– buttons
Press to move the cursor (▶) to an item or to adjust value in a menu.

⓲ MENU button
Press to make the menu appear or to go to the following menu.

⓳ ENTER button
Press to select the desired item in a menu.

⓴ VOL +/– buttons
Press to obtain the desired volume.

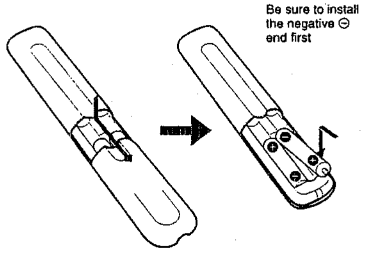
㉑ CH +/– buttons
(This button does not operate with the monitor.)

Note

❸–❺, ❼, ❽, ⓬, ⓭ buttons are only available when installing the Scan Converter Adaptor BKM-201SC to the monitor.

Installing batteries

Insert two size AA (R6) batteries in correct polarity.

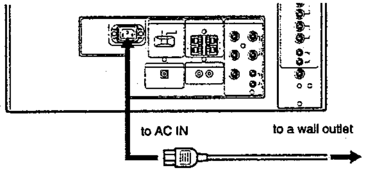


Notes

- In normal operation, batteries will last up to half a year. If the Remote Commander does not operate properly, the batteries might be exhausted. Replace them with new ones.
- To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the Remote Commander for a fairly long time.
- If you connect the cable to the CONTROL S IN jack on the rear of the monitor, you cannot operate the monitor with the supplied Remote Commander.

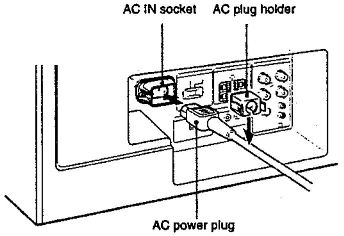
Power Sources

Connect the AC power cord (supplied) to the AC IN socket and to a wall outlet.

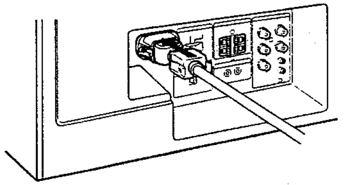


To connect an AC power cord securely with an AC plug holder

1 Plug the power cord into the AC IN socket. Then, attach the AC plug holder (supplied) to the AC power cord.



2 Slide the AC plug holder over the cord until it connects to the attached holder.



To remove the AC power cord

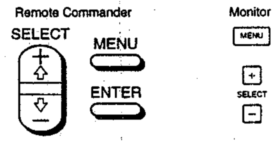
Squeeze the left and right sides and pull out the AC plug holder.

Using On-screen Menus

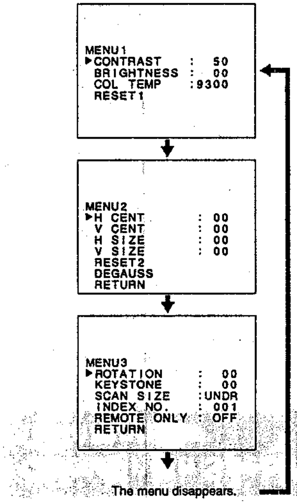
Operating Through Menus

There are four buttons on the monitor and the Remote Commander for menu operations.
To display a menu, first press MENU. Press + or – to move the cursor (▶) and press ENTER to select an item.
To return to the normal screen, press MENU repeatedly until the menu disappears.

Menu operating buttons

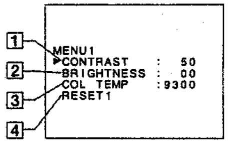

Remote Commander
SELECT
MENU
ENTER
Monitor
MENU
SELECT
ENTER

Each time you press MENU, the screen changes as shown below. For details see the following guide.


MENU1
▶CONTRAST : 50
BRIGHTNESS : 00
COL TEMP :9300
RESET1
MENU2
▶H CENT : 00
V CENT : 00
H SIZE : 00
V SIZE : 00
RESET2
DEGAUSS
RETURN
MENU3
▶ROTATION : 00
KEYSTONE : 00
SCAN SIZE :UNDR
INDEX NO. : 001
REMOTE ONLY : OFF
RETURN
The menu disappears.

Menu Guide

Menu 1


1
2
3
4
MENU1
▶CONTRAST : 50
BRIGHTNESS : 00
COL TEMP :9300
RESET1

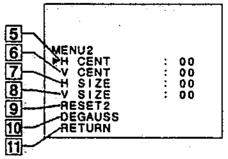
1 CONTRAST
Press + to increase the contrast and press – to decrease it.

2 BRIGHTNESS
Press + to make the picture brighter and press – to make it darker.

3 COL TEMP
Select the color temperature from among 9300K and 6500K.

4 RESET1
Select to restore the factory settings in MENU 1.

Menu 2


5
6
7
8
9
10
11
MENU2
▶H CENT : 00
V CENT : 00
H SIZE : 00
V SIZE : 00
RESET2
DEGAUSS
RETURN

5 H CENT
Adjusts the horizontal centering. Press + to move the picture to the right and press – to move it to the left.

6 V CENT
Adjusts the vertical centering. Press + to move the picture up and press – to move it down.

7 H SIZE
Adjusts the horizontal picture size. Press + to enlarge the horizontal size and press – to diminish it.

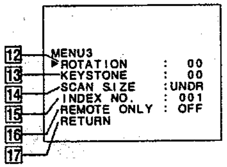
8 V SIZE
Adjusts the vertical picture size. Press + to enlarge the vertical size and press – to diminish it.

9 RESET2
Select to restore the factory settings in MENU 2.

10 DEGAUSS
Select to demagnetize the screen. Wait for 10 minutes or more before activating this feature again. The same interval is needed after turning on the monitor.

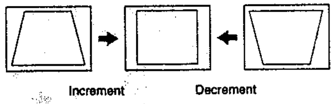
11 RETURN
Select to return to the MENU 1 screen.

Menu 3


12
13
14
15
16
17
MENU3
▶ROTATION : 00
KEYSTONE : 00
SCAN SIZE :UNDR
INDEX NO. : 001
REMOTE ONLY : OFF
RETURN

12 ROTATION
Adjusts the picture tilt due to the influence of the earth's magnetism. Press + to rotate the picture clockwise and press – to rotate it counterclockwise.

13 KEYSTONE
Adjusts the vertical trapezoid distortion due to the influence of the earth's magnetism. Press + to expand the upper part and press – to expand the lower part.


Increment
Decrement

14 SCAN SIZE
Select to switch scan size to either OVER (over scan) or UNDR (under scan).
This item is only available when VGA (Graphics) signal is input. In this case, the description of VGA (Graphics) signal is as follows:

- fH: 31.5 kHz
- fV: 60 Hz
- and also contains NTSC signal which is doubled for each line to 31.5 kHz horizontal frequency.

Selectable items depending on the input signal type are as follows:

	OVER (Over scan)	UNDR (Under scan)
VGA (Graphics) (31.5 kHz × 60.0 Hz)	●	●
VGA (Text) (31.5 kHz × 70.0 Hz)	–	●
Doubled PAL (31.25 kHz × 50.0 Hz)	●	–

Notes

- When VGA (Text) signal is input, SCAN SIZE is automatically set to UNDR.
- When PAL signal which is doubled for each line to 31.25 kHz horizontal frequency is input, SCAN SIZE is automatically set to OVER.

15 INDEX NO.
Sets the index number of the monitor. You cannot set the number with the Remote Commander. Use the buttons on the monitor. For more information about the index number, see "Operating a Specific Monitor with the Remote Commander" on page 12 (EN).

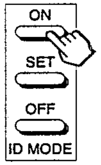
16 REMOTE ONLY
Select ON to disable the front control buttons on the monitor. The monitor can only be controlled with the Remote Commander. (You can then only turn on or off the power on the monitor.)
While REMOTE ONLY is ON, the indicators on the front panel go off.
The setting in this item is still retained when the AC power cord is disconnected, but it will be canceled by switching off the monitor with its main power switch.

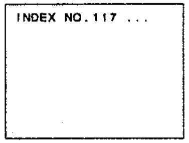
17 RETURN
Select to return to the MENU 2 screen.

Operating a Specific Monitor With the Remote Commander

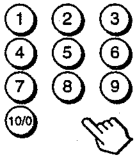
Using the supplied Remote Commander, you can operate a specific monitor without affecting other monitors that are installed together.

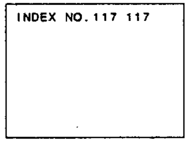
1 Press ID MODE ON on the Remote Commander. Monitor index numbers appear in white characters on all the monitors. (Every monitor is allocated an individual preset index number from 1 to 255. See "To change the index number" in the column to the right on this page to change the index number.)



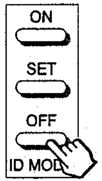

INDEX NO.117 ...

2 Input the index number of the monitor you want to operate using 0 – 9 buttons on the Remote Commander.
The input number appears right next to each monitor's own index number.



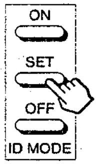


3 Press ID MODE SET.
The character on the selected monitor changes to cyan while others change to red.



Now you can operate only a specified monitor. (All operations are available in ID mode except POWER ON/OFF.)

4 After necessary adjustment, press ID MODE OFF. The monitor returns to the normal mode.



To change the index number

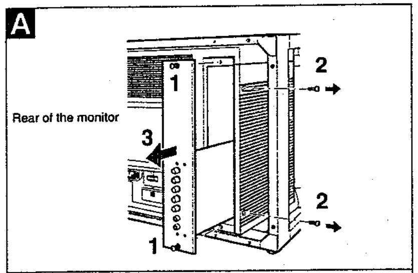
You can change the index number if necessary.
You cannot change the number with the Remote Commander. Use the buttons on the monitor.

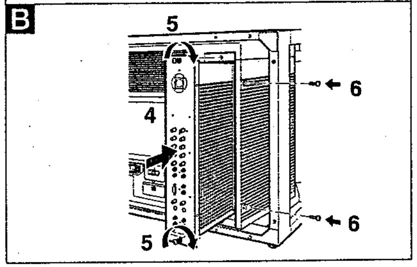
1 Display MENU 3 screen by pressing the MENU button.

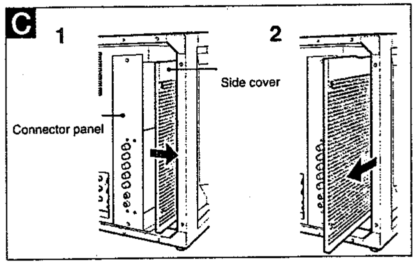
2 Select INDEX NO. with the SELECT +/– buttons and press the ENTER button.

3 Select the index number with the SELECT +/– buttons and press the ENTER button.

1-2. BKM-201SC







Follow the steps below to install the Scan Converter Adaptor into the PGM-200R1A/200R1E/200R1U Trinitron Color Graphic Monitor.

Installing the Scan Converter Adaptor (Figures A and B)

Before installation, make sure that the power to all the equipment is off.

1 Loosen the two screws on the rear of the monitor with a screwdriver.

2 Remove the two screws on the side of the monitor with a screwdriver.
You can now detach the connector panel.

3 Slowly pull out the connector panel from the monitor.

4 Insert the Scan Converter Adaptor into the slot.
Make sure that the two connectors inside the monitor are connected firmly.

5 Tighten the two screws with a screwdriver.
First, tighten the one on the upper side.

6 Tighten the two screws you removed in step **2** with a screwdriver.

Caution

Be careful not to touch the connectors inside the slot.

Detaching the Side Cover (Figure C)

You may remove the side cover if you have some difficulties to install the Scan Converter Adaptor.

1 Pull the side cover outwards.

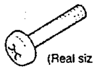
2 Remove the side cover as illustrated at left.

To reattach the side cover

Follow the steps above in reverse order.

Supplied Accessories

The following spare screws are supplied.
For the side cover: +B M4 × 14 (2)



WARNING

Owner's Record

The model and serial numbers are located on the rear. Record the model and serial numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. BKM-201SC Serial No.________

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Dangerously high voltages are present inside the unit. Do not open the cabinet. Refer servicing to qualified personnel only.

This operating instructions explain how to operate the BKM-201SC.

For installation, consult your nearest Sony dealer.

For the customers in the U.S.A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the customers in Canada

This apparatus complies with the Class A limits for radio noise emissions set out in Radio Interference Regulations.

Precautions

On Safety

- The nameplate indicating operating voltage, power consumption, etc. is located on the rear of PGM-200R1A/200R1E/200R1U.

Note

This unit is supplied the power from PGM-200R1A/200R1E/200R1U.

- Should any solid object or liquid fall into the cabinet, unplug PGM-200R1A/200R1E/200R1U and have it checked by qualified personnel before operating it further.

On Installation

- Allow adequate air circulation to prevent internal heat built-up. Do not place the unit on surface (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- If the internal temperature becomes high, the built-in thermal protector automatically functions to turn off the unit.

On Application

This unit converts the scanning frequency and the scanning lines of the video signal. The unit does not recognize or communicate the information superimposed on the blanking signal, such as a copy guard signal or closed caption information.
A part of the information of the input signal may be lost in the conversion process.

On Repacking

Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit.
When shipping the unit to another location, repack it as illustrated on the carton.

If you have any questions about this unit, contact your authorized Sony dealer.

Features

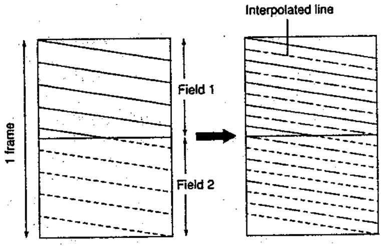
This unit is designed for converting the various computer signal or video signal to the VGA[1] format signal and displaying it on the monitor screen of PGM-200R1A/200R1E/200R1U.

VGA format converting

The unit is capable of converting the various signal, such as video and computer signal, to the VGA format signal.
The unit can convert a low-rate input signal into a high-rate one and perform flexible adjustments of the images, such as zoom, and still.

Line Doubler

The scanning frequencies of the input NTSC or PAL signals can be doubled to 31.5 kHz (NTSC) or 31.25 kHz (PAL) horizontal frequency by interpolating information on line signals vertically. This enables smooth reproduction of video pictures.



On-screen menus

You can adjust the settings by using the on-screen menus of the PGM-200R1A/200R1E/200R1U.

Other features

- Three dimensional comb filter for NTSC Y/C separation
- Line correlation comb filter for PAL Y/C separation
- Up to x4 zooming
- Accepts infrared or wired Sony remote commanders using SIRCS code
- On-screen display in five languages for user-friendly access
- Built-in test patterns for casual monitor checking
- Three sets of video inputs with audio inputs: one composite video or Y/C inputs, one RGB input, and one RGB/component input
- Memory function for storage of up to five picture settings
- Automatic input signal detection with indication
- Windows95[2] P&P compatible

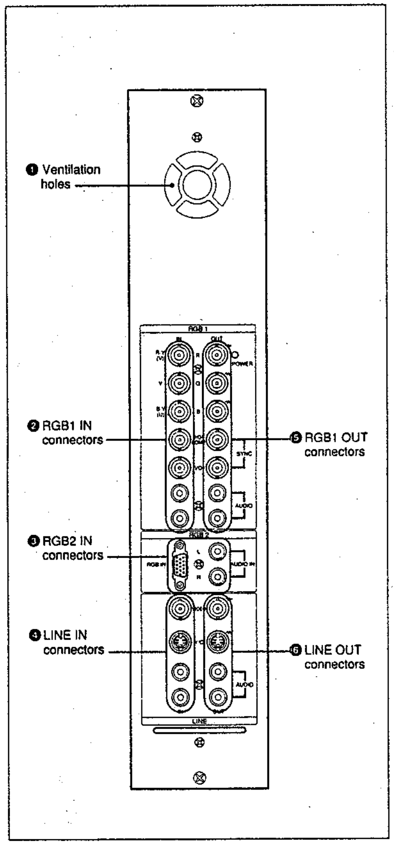
---

[1] VGA is a registered trademark of the International Business Machines Corporation, USA.

[2] Windows95 is a registered trademark of the Microsoft Corporation.

Location and Function of Parts and Controls

Rear Panel



❶ Ventilation holes

Note

Do not block the ventilation holes, or internal heat build-up may occur, causing fire or damage to the unit.

❷ RGB1 IN connectors

R (R-Y)/G (Y)/B (B-Y) IN (BNC-type): Input the RGB signal or component (Y/B-Y/R-Y) signal. Connect to the RGB signal or component (Y/B-Y/R-Y) signal outputs of a computer or video equipment.

HD/COMP IN (BNC-type): Input the H sync signal or composite sync signal. Connect to the H sync signal or composite sync signal output of a computer or video equipment.

VD IN (BNC-type): Input the V sync signal. Connect to the V sync signal output of a computer or video equipment.

External sync signal is selected automatically. See the priority chart below.

Input connector	Input sync signals		
HD/COMP IN	H Sync	Comp Sync	—
VD IN	V Sync	—	—
G(Y) IN	Sync on G	Sync on G	Sync on G
Sync signals to be selected	H Sync V Sync	Comp Sync	Sync on G

AUDIO IN (L/R) (phono type): Input the audio signal. Connect to the audio output of a computer or video equipment. Connect to the channel L when the audio signal is monaural.

❸ RGB2 IN connectors

RGB IN (D-sub 15-pin): Connect to the RGB signal output of a computer.

AUDIO IN (L/R) (phono type): Input the audio signal. Connect to the audio output of a computer. Connect to the channel L when the audio signal is monaural.

(Continued)

❹ LINE IN connectors

VIDEO IN (BNC-type): Connect to the composite video signal output of the video equipment.

Y/C IN (Mini DIN 4-pin): Connect to the Y/C signal output of the video equipment.

AUDIO IN (L/R) (phono type): Connect to the audio output of the video equipment. Connect to the channel L when the audio signal is monaural.

❺ RGB1 OUT connectors

These connectors are used as loop-through outputs of the RGB1 IN connectors ❷.

R (R-Y)/G (Y)/B (B-Y) IN (BNC-type): Loop-through outputs of the R (R-Y)/G (Y)/B (B-Y) IN connectors. Connect to the R (R-Y)/G (Y)/B (B-Y) signal inputs of another monitor.

HD/COMP OUT (BNC-type): Loop-through output of the HD/COMP IN connector. Connect to the H sync signal or composite sync signal input of another monitor.

VD OUT (BNC-type): Loop-through output of the VD IN connector. Connect to the V sync signal input of another monitor.

Note

HD/COMP OUT and VD OUT are high impedance outputs.
When using these outputs, it is recommend to connect a monitor with high impedance sync input connector, or the picture might disappear because of the sync signal level mismatch.

AUDIO OUT (L/R) (phono type): Loop-through outputs of the AUDIO IN jacks. Connect to the audio inputs of another monitor.

❻ LINE OUT connectors

These connectors are used as loop-through outputs of the LINE IN connectors ❹.

VIDEO OUT (BNC-type): Connect to the composite video signal input of another monitor or video equipment.

Y/C OUT (Mini DIN 4-pin): Connect to the Y/C signal input of another monitor or video equipment.

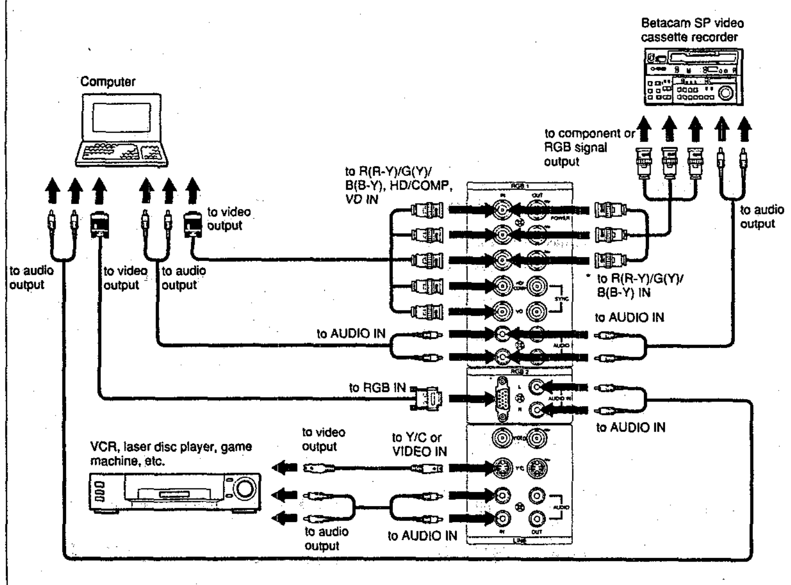
AUDIO OUT (L/R) (phono type): Loop-through inputs of the AUDIO IN jacks. Connect to the audio inputs of another monitor or video equipment.

Connection

Before you get started

- First make sure that the power to each piece of equipment is turned off.
- Use connecting cables suitable for the equipment to be connected.
- The cable connectors should be fully inserted into the jacks. A loose connection may cause hum and other noise.
- To disconnect the cable, pull out by grasping the plug. Never pull the cable itself.
- Read the instruction manual of the equipment to be connected.

Connection Example


Betacam SP video cassette recorder
Computer
to component or RGB signal output
to audio output
to video output
to audio output
to video output
to audio output
to R(R-Y)/G(Y)/B(B-Y), HD/COMP, VD IN
* to R(R-Y)/G(Y)/B(B-Y) IN
to AUDIO IN
to AUDIO IN
to RGB IN
to AUDIO IN
VCR, laser disc player, game machine, etc.
to video output
to Y/C or VIDEO IN
to audio output
to AUDIO IN

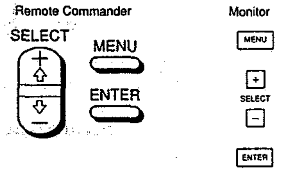
* cannot use at the same time.

Using On-screen Menus

Operating Through Menus

Menu operating buttons

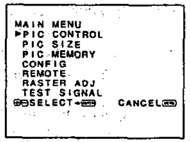
There are four buttons on the monitor and the Remote Commander for menu operations.


Remote Commander
SELECT
MENU
ENTER
Monitor
MENU
+
SELECT
−
ENTER

Configuration of the menu

To select the language used in the menu, see page 21(EN).

1 Press MENU.
The main menu appears on the monitor screen.



```
MAIN MENU
▶PIC CONTROL
 PIC SIZE
 PIC MEMORY
 CONFIG
 REMOTE
 RASTER ADJ
 TEST SIGNAL
⊕⊖SELECT→ENTER    CANCEL MENU
```

2 Press SELECT+ or – to move the cursor (▶) and press ENTER to select a menu.
The selected menu appears on the monitor screen.

3 Press SELECT+ or – to move the cursor (▶) and press ENTER to select an item.
The menu for the selected item appears on the monitor screen.

4 Press SELECT+ or – to adjust or select the setting and press ENTER to set.
The setting is registered and the menu returns to the previous menu.

To return to the normal screen, press the MENU button repeatedly until the menu disappears.

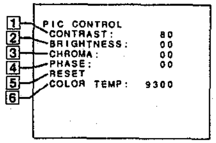
Menu Guide

Note

"– – – –" appears next to an item when its function is not available. The availability depends on the types of input signal.

PIC CONTROL menu

This menu is used for adjusting the picture.



```
PIC CONTROL
CONTRAST:          80
BRIGHTNESS:        00
CHROMA:            00
PHASE:             00
RESET
COLOR TEMP:      9300
```

1 CONTRAST

Press + to increase the contrast and press – to decrease it.

2 BRIGHTNESS

Press + to make the picture brighter and press – to make it darker.

3 CHROMA

Press + to increase color saturation and press – to decrease it.

4 PHASE

Press + to make overall picture greenish and press – to make it purplish.

5 RESET

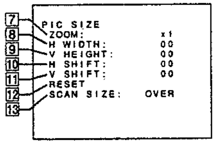
Select to restore the factory settings in PIC CONTROL menu items 1 to 4.
For details on using the reset function, see "Restoring the Contrast, Brightness, Phase, and Chroma to Original Settings" on page 16(EN).

6 COL TEMP

Select the color temperature between 9300K and 6500K.

PIC SIZE menu

This menu is used for zooming, positioning, and resizing the picture.



```
PIC SIZE
ZOOM:            x1
H WIDTH:         00
V HEIGHT:        00
H SHIFT:         00
V SHIFT:         00
RESET
SCAN SIZE:     OVER
```

7 ZOOM

Zooms up the picture two, three, and four times.

8 H WIDTH

Adjusts the horizontal picture size. Press + to enlarge the horizontal size and press – to diminish it.

9 V HEIGHT

Adjusts the vertical picture size. Press + to enlarge the vertical size and press – to diminish it.

10 H SHIFT

Adjusts the horizontal centering. Press + to move the picture to the right and press – to move it to the left.

11 V SHIFT

Adjusts the vertical centering. Press + to move the picture up and press – to move it down.

12 RESET

Select to restore the factory settings in PIC SIZE menu items 7 to 11.
For details on using the reset function, see "Restoring the Original Picture Size and Position" on page 18(EN).

13 SCAN SIZE

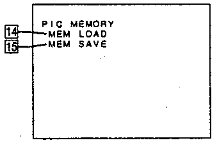
Select to switch scan size to either OVER (over scan) or UNDR (under scan).

Notes

- Under scan is not available while in the line doubler PAL (625/50) mode.
- In case of HDTV signal, the V HEIGHT adjustment is only available down to –13.

PIC MEMORY menu

This menu is used for saving or recalling the settings in the PIC CONTROL and PIC SIZE menus.



```
PIC MEMORY
MEM LOAD
MEM SAVE
```

For details, see "Using the memory" on page 19(EN).

14 MEM LOAD

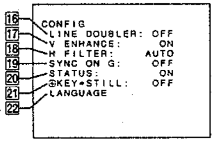
Recalls the preset settings.

15 MEM SAVE

Saves the settings in the PIC CONTROL and PIC SIZE menu.

CONFIG menu

This menu is used for adjusting the signal or selecting the language.



```
CONFIG
LINE DOUBLER:  OFF
V ENHANCE:      ON
H FILTER:     AUTO
SYNC ON G:     OFF
STATUS:         ON
⊕KEY→STILL:    OFF
LANGUAGE
```

16 LINE DOUBLER

Select ON to activate the line doubler function when the signal based on NTSC (525/60) or PAL (625/50) color system is input.
For details on using the line doubler function, see "Getting a High-Resolution Picture by Doubling the Scanning Rate – LINE DOUBLER Function" on page 13(EN).

17 V ENHANCE

Select ON to sharpen the vertical edge.

Notes

- This function is not available while in the line doubler mode.
- Select OFF when the moving picture is input.

(Continued)

18 H FILTER

Select AUTO normally.
Select HIGH when the vertical ringing appears on the screen.
Select LOW when the moiré pattern or noise appears on the screen.

19 SYNC ON G

Select ON to force monitor to get the sync signal on green.

20 STATUS

Select ON to display the information on the input signal for about five seconds when turning on the power or switching the input signal.

21 +KEY→STILL

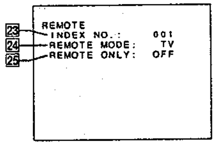
Sets the SELECT+ button on the monitor to function for still. (No buttons on the monitor function for still.)
Select ON to allow direct access to the picture still mode from the monitor control panel.
For details, see "Watching a Still Picture" on page 12(EN).

22 LANGUAGE

Select the on-screen language among five languages.
For details on selecting the language, see "Selecting the On-screen Language" on page 21(EN).

REMOTE menu

This menu is used for the remote control setting.



```
REMOTE
INDEX NO.:        001
REMOTE MODE:       TV
REMOTE ONLY:      OFF
```

23 INDEX NO.

Sets the index number of the monitor.
For more information about the index number, refer to the operating instructions supplied with PGM-200R1A/200R1E/200R1U.

24 REMOTE MODE

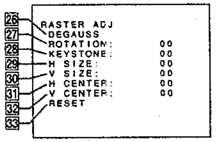
Select the Remote Commander mode.
TV: Sony monitors' or TVs' commander
PJ: Sony projectors' commander
OFF: Disables the remote control.
For details, see "Using the Remote Commander" on page 22(EN).

25 REMOTE ONLY

Select ON to disable the front control buttons on the monitor. The monitor can only be controlled with the Remote Commander. (You can then only turn on or off the power on the monitor.)
While REMOTE ONLY is ON, the indicators on the front panel go off.
The setting in this item is still retained when the AC power cord is disconnected, but it will be canceled by switching off the monitor with its main power switch.

RASTER ADJ menu

This menu is used for adjusting the raster of the monitor.



```
RASTER ADJ
DEGAUSS
ROTATION:        00
KEYSTONE:        00
H SIZE:          00
V SIZE:          00
H CENTER:        00
V CENTER:        00
RESET
```

26 DEGAUSS

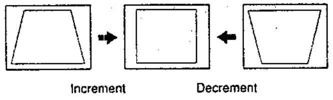
Select to demagnetize the screen. Wait for 10 minutes or more before activating this feature again. The same interval is needed after turning on the monitor.

27 ROTATION

Adjusts the picture tilt due to the influence of the earth's magnetism. Press + to rotate the picture clockwise and press – to rotate it counterclockwise.

28 KEYSTONE

Adjusts the vertical trapezoid distortion due to the influence of the earth's magnetism. Press + to expand the upper part and press – to expand the lower part.



29 H SIZE
Adjusts the horizontal picture size. Press + to enlarge the horizontal size and press – to diminish it.

30 V SIZE
Adjusts the vertical picture size. Press + to enlarge the vertical size and press – to diminish it.

31 H CENTER
Adjusts the horizontal centering. Press + to move the picture to the right and press – to move it to the left.

32 V CENTER
Adjusts the vertical centering. Press + to move the picture up and press – to move it down.

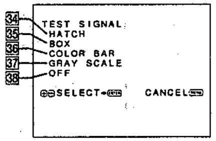
33 RESET
Select to restore the factory settings in RASTER ADJ menu items 28 to 32.

Note

There are two ways to change the picture size and center. One is to change the picture area itself, which can be done through RASTER ADJ menu.
The other is to change the image size and center inside picture area, which can be done through PIC SIZE menu.

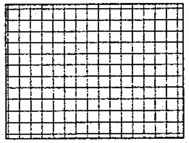
TEST SIGNAL menu

This menu is used for using the test signal pattern.

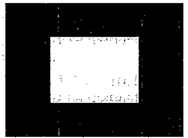


For details on the test signal pattern, see "Using the Test Pattern" on page 20(EN).

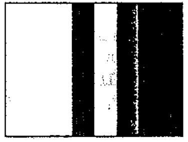
34 HATCH
Displays the following test signal pattern.



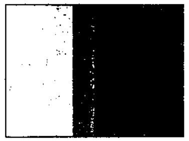
35 BOX
Displays the following test signal pattern.



36 COLOR BAR
Displays the following test signal pattern.



37 GRAY SCALE
Displays the following test signal pattern.



38 OFF
The test signal pattern goes off from the screen.

Watching the Picture

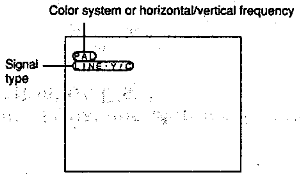
Before you start
- Turn on the monitor.
- Turn on the connected equipment and play a video source.
- To display the information on the input signal on the screen when turning on the power or switching the input signal, set "STATUS" in the CONFIG menu to ON. For details, see page 14(EN).
- To set the on-screen language to yours, see page 21(EN).

Switching the Picture

1. Press CONTROL on the front panel of the monitor.
RGB1, RGB2, YUV, LINE, and Y/C buttons light up.

2. Select the input source to be displayed by pressing the following buttons.

RGB1:	Selects the audio and video signal input from the RGB1 connectors. (If the input signal is component signal, press YUV also.)
RGB2:	Selects the audio and video signal input from the RGB2 connectors.
YUV:	Selects the audio and video signal input from the RGB1 connectors when the input signal is component signal.
LINE:	Selects the audio and video signal input from the VIDEO connector in the LINE connectors.
Y/C:	Selects the audio and video signal input from the Y/C connector in the LINE connectors.



The selected input signal appears on the monitor screen.

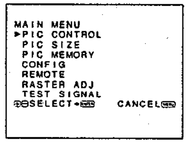
You can also switch the input signal from the Remote Commander.
For details, see "Using the Remote Commander" on page 22(EN).

Notes
- The active input signal is converted to VGA format and output from the ACTIVE OUT connectors.
- We recommend the input source video equipment equipped with the TBC (time base corrector). If you receive the signal without the TBC, the picture may disappear due to disturbance of the sync signal.

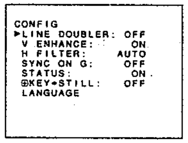
Watching a Still Picture

When you operate from the Remote Commander, simply press the STILL button.
For details on operating from the Remote Commander, see "Using the Remote Commander" on page 22(EN).
When you operate from the monitor, press the SELECT + button. To assign the still function to the SELECT + button, follow the steps below.

1. Press MENU.
The main menu appears on the monitor screen.

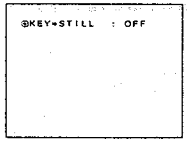


2. Press SELECT+ or – to move the cursor (▶) to "CONFIG" and press ENTER.
The CONFIG menu appears on the monitor screen.



```
CONFIG
▶LINE DOUBLER: OFF
 V ENHANCE:     ON
 H FILTER:    AUTO
 SYNC ON G:    OFF
 STATUS:        ON
 ⊕KEY➡STILL:   OFF
 LANGUAGE
```

3. Press SELECT+ or – to move the cursor (▶) to "+KEY➡STILL" and press ENTER.
The following menu appears on the monitor screen.



```
⊕KEY➡STILL  : OFF
```

4 Press SELECT+ to set "+KEY→STILL" to ON and press ENTER.
"OFF" changes to "ON".

5 Press MENU twice.
The menu disappears from the monitor screen.

6 Press SELECT+.
The output signal is displayed as a still picture.

To resume the normal screen, press the SELECT+ button again or switch the input signal.

Notes

- When operating the menu, the SELECT+ button functions as for the menu operation.
- The SELECT + and – buttons flash while in the still mode.

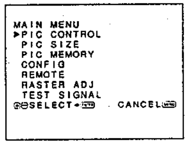
Getting a High-Resolution Picture by Doubling the Scanning Rate – LINE DOUBLER Function

The line doubler function of this unit converts the input NTSC or PAL signal into a digitally interpolated, high scan-rate output signal. The output signal format becomes a non-interlaced signal whose horizontal frequency is 31.5 kHz (NTSC signal), or 31.25 kHz (PAL signal) and vertical frequency is synchronized to the input signal.
The line doubler up-converts the signal field by field by interpolating information on two line signals vertically. Therefore, a fast moving picture is reproduced as a natural high-resolution picture.

- The converted signal is output from the ACTIVE OUT connectors on the monitor.

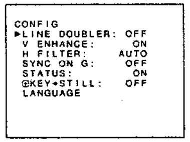
To activate the line doubler

1 Press MENU.
The main menu appears on the monitor screen.



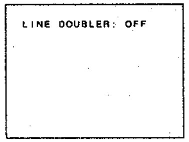
```
MAIN MENU
▶PIC CONTROL
 PIC SIZE
 PIC MEMORY
 CONFIG
 REMOTE
 RASTER ADJ
 TEST SIGNAL
⊕⊖SELECT◆      CANCEL
```

2 Press SELECT+ or – to move the cursor (▶) to "CONFIG" and press ENTER.
The CONFIG menu appears on the monitor screen.



```
CONFIG
▶LINE DOUBLER: OFF
 V ENHANCE:     ON
 H FILTER:    AUTO
 SYNC ON G:    OFF
 STATUS:        ON
 ⊕KEY◆STILL:   OFF
 LANGUAGE
```

3 Press SELECT+ or – to move the cursor (▶) to "LINE DOUBLER" and press ENTER.
The following menu appears on the monitor screen.



```
LINE DOUBLER: OFF
```

4 Press SELECT+ to set "LINE DOUBLER" to ON and press ENTER.
The picture which activate the line doubler appears on the monitor screen.

To deactivate the line doubler function, set "LINE DOUBLER" to OFF at the step **4** above.

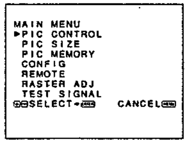
Notes

- The "LINE DOUBLER" is available only with NTSC or PAL.
- When the line doubler is activated, "ZOOM", "H WIDTH" and "V HEIGHT' in the menu do not function.
- When the line doubler is activated, the size control is not available.

Input Signal and Monitor Status Information Display

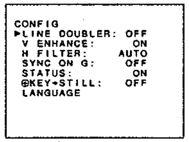
Input signal and monitor status information are displayed on-screen for about five seconds when turning on the power or switching the input signal. To disable this function, follow the steps below.

1 Press MENU.
The main menu appears on the monitor screen.



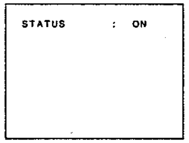
```
MAIN MENU
▶PIC CONTROL
 PIC SIZE
 PIC MEMORY
 CONFIG
 REMOTE
 RASTER ADJ
 TEST SIGNAL
⊕⊖SELECT◆      CANCEL
```

2 Press SELECT+ or – to move the cursor (▶) to "CONFIG" and press ENTER.
The CONFIG menu appears on the monitor screen.



```
CONFIG
▶LINE DOUBLER: OFF
 V ENHANCE:     ON
 H FILTER:    AUTO
 SYNC ON G:    OFF
 STATUS:        ON
 ⊕KEY◆STILL:   OFF
 LANGUAGE
```

3 Press SELECT+ or – to move the cursor (▶) to "STATUS" and press ENTER.
The following menu appears on the monitor screen.



```
STATUS    : ON
```

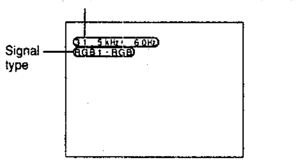
4 Press SELECT+ to set "STATUS" to OFF and press ENTER.
The setting is registered.

To activate the information function, set "STATUS" to ON at the step 4 above.

Note

You can obtain the input signal information anytime by pressing the DISPLAY button on the Remote Commander, regardless of the above setting.
For details on actual on-screen information, See page 15(EN).

The input signal information list



Input signal	Color system or horizontal/vertical frequency	
NTSC	NTSC	
PAL	PAL	
VGA (Graphics)	31.5 kHz	60 Hz
VGA (Text)	31.5 kHz	70 Hz
HDTV	33.8 kHz	60 Hz
Mac[a] 13"	35.0 kHz	67 Hz
VESA[b] 800×600	37.9 kHz	60 Hz
VESA 1024×768	48.4 kHz	60 Hz
Mac 16"	49.7 kHz	75 Hz
ATI[c] 1280×1024	64.0 kHz	60 Hz
Mac 21"	68.7 kHz	75 Hz
VESA 1280×1024	80.0 kHz	75 Hz

a) Mac (Macintosh) is a registered trademark of Apple Computer, Inc.
b) VESA is a registered trademark of Video Electronics Standard Association.
c) ATI is a registered trademark of ATI Technologies, Inc.

Actual on-screen display of the monitor status

On-screen display	Significance
31.5kHz / 60Hz (eg.)	The selected input signal is computer RGB.
525 / 60 (eg.)	The selected input signal is RGB or component video.
NTSC	The selected input signal is NTSC.
PAL	The selected input signal is PAL.
LINE×2	The line doubler is on.
OTHERS	The input signal is out of the capture range.[a]
NO SYNC	There is no input signal.
MUTING	The sound is muted.
RGB1 RGB	The signal mode of RGB1 is set to RGB.
RGB1 YUV	The signal mode of RGB1 is set to component video.
LINE COMP	Composite video input is selected at LINE.
LINE Y/C	Y/C video input is selected at LINE.
S/G	The external sync is set to "sync on green".
STILL	The picture is frozen.

a) "OTHERS" would also appear when the external sync setting (sync on green or not) of the product is not appropriate.

Adjusting the Picture

While watching the picture, you can adjust contrast, brightness, chroma, and phase to suit your taste. The adjustments can be carried out for each input signal separately. You can also store the adjusted levels in memory.

Adjusting the Contrast, Brightness, Phase, and Chroma

Press MENU so that the main menu appears on the monitor screen and select the "CONTRAST", "BRIGHTNESS", "CHROMA", or "PHASE" from the CONFIG menu with the SELECT+/– buttons.

CONTRAST

Select the "CONTRAST" with the SELECT+/– buttons and press the ENTER button.
Adjust the contrast with the SELECT+/– buttons in the range from MIN (0) to MAX (+100).

+: to increase picture contrast
–: to decrease picture contrast

BRIGHTNESS

Select the "BRIGHTNESS" with the SELECT+/– buttons and press the ENTER button.
Adjust the brightness with the SELECT+/– buttons in the range from MIN (–50) to MAX (+50).

+: to make overall picture greenish
–: to make overall picture purplish

CHROMA

Select the "CHROMA" with the SELECT+/– buttons and press the ENTER button.
Adjust the chroma with the SELECT+/– buttons in the range from MIN (–50) to MAX (+50).

+: to increase color intensity
–: to decrease color intensity

PHASE

Select the "PHASE" with the SELECT+/– buttons and press the ENTER button.
Adjust the phase with the SELECT+/– buttons in the range from MIN (–50) to MAX (+50).

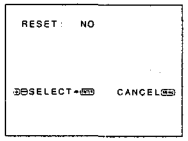
+: to make overall picture greenish
–: to make overall picture purplish

Notes

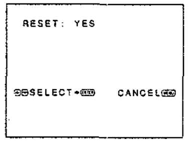
- CHROMA and PHASE controls do not function with RGB signal.
- PHASE control does not function with component signal.
- PHASE control does not function with PAL color source.
- Do not change the CHROMA/PHASE (NTSC only) level when the selected signal is not NTSC or PAL. Although it gives no effect to the current picture, it does affect the picture of the NTSC or PAL signal which is input later.

Restoring the Contrast, Brightness, Phase, and Chroma to Original Settings

1 From the PIC CONTROL menu, Press SELECT+ or – to move the cursor (▶) to "RESET" and press ENTER.
The following menu appears on the monitor screen.


RESET: NO

2 Press SELECT+ or –.
"NO" changes to "YES."


RESET: YES

3 Press ENTER.
The contrast, brightness, chroma, and phase settings are restored.

To cancel the reset function, press the MENU button.

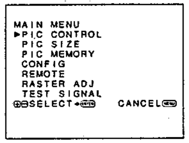
Zooming, Resizing, and Positioning the Picture

You can zoom up the picture making it two, three, or four times as large as the original size.
You can also shift the position of the picture so that it fits in the screen, or adjust the vertical and horizontal size of the picture separately.

Zooming Up the Picture

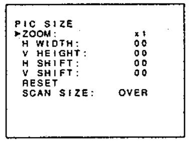
You can also operate from the Remote Commander.
For details, see "Using the Remote Commander" on page 22(EN).

1 Press MENU.
The main menu appears on the monitor screen.



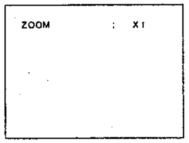
```
MAIN MENU
▶PIC CONTROL
 PIC SIZE
 PIC MEMORY
 CONFIG
 REMOTE
 RASTER ADJ
 TEST SIGNAL
⊕⊖SELECT◆ENTER    CANCEL MENU
```

2 Press SELECT+ or – to move the cursor (▶) to "PIC SIZE" and press ENTER.
The PIC SIZE menu appears on the monitor screen.



```
PIC SIZE
▶ZOOM:              x1
 H WIDTH:           00
 V HEIGHT:          00
 H SHIFT:           00
 V SHIFT:           00
 RESET
 SCAN SIZE:       OVER
```

3 Press SELECT+ or – to move the cursor (▶) to "ZOOM" and press ENTER.
The following menu appears on the monitor screen.



```
ZOOM        :  X1
```

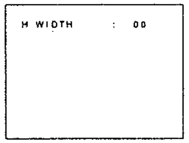
4 Press SELECT+ or – to set zoom.
Each time you press SELECT+, the picture is magnified by two, three, and four times respectively.
To zoom down, press SELECT –.

5 Press ENTER.
The menu returns to the PIC SIZE menu.

You can move the zooming-up portion with "H SHIFT" and "V SHIFT" in the PIC SIZE menu.
For details, see page 18(EN).

Resizing the Picture

1 From the PIC SIZE menu, press SELECT+ or – to move the cursor (▶) to "H WIDTH" and press ENTER.
The following menu appears on the monitor screen.

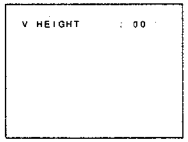


```
H WIDTH      :   00
```

2 Press SELECT+ or – to resize the picture.
+: to expand horizontal size
–: to reduce horizontal size
The horizontal picture size is indicated on the monitor screen in the range from MIN(–50) to MAX(+50).

3 Press ENTER.
Returns to the PIC SIZE menu.

4 Press SELECT+ or – to move the cursor (▶) to "V HEIGHT" and press ENTER.
The following menu appears on the monitor screen.



```
V HEIGHT     :   00
```

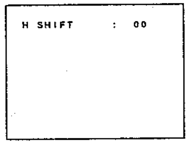
5 Press SELECT+ or – to resize the picture.
+: to expand vertical size
–: to reduce vertical size
The vertical picture size is indicated on the monitor screen. The factory value is 00.

(Continued)

6 Press ENTER.
The menu returns to the PIC SIZE menu.

Adjusting the Picture Position

1 From the PIC SIZE menu, press SELECT+ or – to move the cursor (▶) to "H SHIFT" and press ENTER.
The following menu appears on the monitor screen.

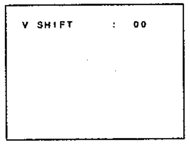


```
H SHIFT      :   00
```

2 Press SELECT+ or – to shift the picture.
+: to shift the picture to the left
–: to shift the picture to the right
The horizontal picture position is indicated on the monitor screen. The factory value is 00.

3 Press ENTER.
Returns to the PIC SIZE menu.

4 Press SELECT+ or – to move the cursor (▶) to "V SHIFT" and press ENTER.
The following menu appears on the monitor screen.



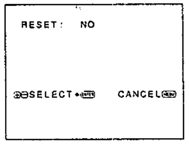
```
V SHIFT      :   00
```

5 Press SELECT+ or – to shift the picture.
+: to shift the picture upward
–: to shift the picture downward
The vertical picture position is indicated on the monitor screen. The factory value is 00.

6 Press ENTER.
The menu returns to the PIC SIZE menu.

Restoring the Original Picture Size and Position

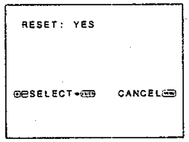
1 From the PIC SIZE menu, press SELECT+ or – to move the cursor (▶) to "RESET" and press ENTER.
The following menu appears on the monitor screen.



```
RESET:   NO

⊕⊖SELECT◆ENTER    CANCEL MENU
```

2 Press SELECT+ or –.
"NO" changes to "YES."



```
RESET:  YES

⊕⊖SELECT◆ENTER    CANCEL MENU
```

3 Press ENTER.
The original picture size and position are restored.

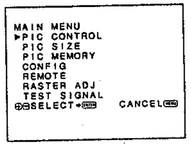
To cancel the reset function, press the MENU button.

Using the Memory

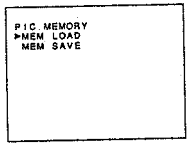
You can save the current picture condition by each input signal using PIC MEMORY function.
The saved condition can be restored whenever necessary.
The items in both PIC CONTROL menu and PIC SIZE menu (except SCAN SIZE) can be memorized.
You can save the picture condition of up to five input signals.

Storing the Current Condition

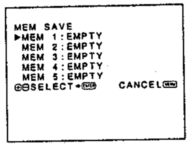
1 Press MENU.
The main menu appears on the monitor screen.


MAIN MENU
▶PIC CONTROL
PIC SIZE
PIC MEMORY
CONFIG
REMOTE
RASTER ADJ
TEST SIGNAL
⊕⊖SELECT→ENTER
CANCEL MENU

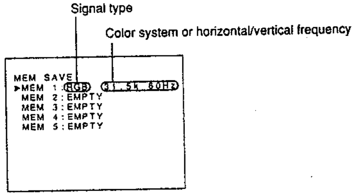
2 Press SELECT+ or – to move the cursor (▶) to "PIC MEMORY" and press ENTER.
The PIC MEMORY menu appears on the monitor screen.


PIC MEMORY
▶MEM LOAD
MEM SAVE

3 Press SELECT+ or – to move the cursor (▶) to "MEM SAVE" and press ENTER.
The following menu appears on the monitor screen.

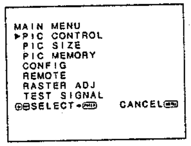

MEM SAVE
▶MEM 1:EMPTY
MEM 2:EMPTY
MEM 3:EMPTY
MEM 4:EMPTY
MEM 5:EMPTY
⊕⊖SELECT→ENTER
CANCEL MENU

4 Press SELECT+ or – to move the cursor (▶) to MEM 1 to 5 and press ENTER.
"COMPLETED" message appears for about five seconds.
The current data is stored under the selected memory number.
If any data has been stored in the selected memory number, the signal type and the color system or horizontal frequency/vertical frequency are now displayed on the right column next to the selected memory number.

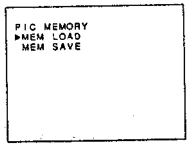

Signal type
Color system or horizontal/vertical frequency
MEM SAVE
▶MEM 1:RGB 31.5k 60Hz
MEM 2:EMPTY
MEM 3:EMPTY
MEM 4:EMPTY
MEM 5:EMPTY

Calling Up the Stored Condition

1 Press MENU.
The main menu appears on the monitor screen.

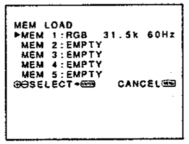

MAIN MENU
▶PIC CONTROL
PIC SIZE
PIC MEMORY
CONFIG
REMOTE
RASTER ADJ
TEST SIGNAL
⊕⊖SELECT→ENTER
CANCEL MENU

2 Press SELECT+ or – to move the cursor (▶) to "PIC MEMORY" and press ENTER.
The PIC MEMORY menu appears on the monitor screen.


PIC MEMORY
▶MEM LOAD
MEM SAVE

(Continued)

3 Press SELECT+ or – to move the cursor (▶) to "MEM LOAD" and press ENTER.
The following menu appears on the monitor screen.


MEM LOAD
▶MEM 1:RGB 31.5k 60Hz
MEM 2:EMPTY
MEM 3:EMPTY
MEM 4:EMPTY
MEM 5:EMPTY
⊕⊖SELECT→ENTER
CANCEL MENU

4 Press SELECT+ or – to move the cursor (▶) to MEM 1 to 5 and press ENTER.
"COMPLETED" message appears for about five seconds.
The picture is adjusted to the selected condition.

Notes

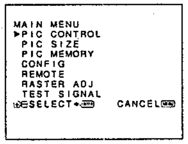
- You cannot recall the memory data if the selected signal is different from the preset signal.
- The following items can be memorized:
  PIC CONTROL menu
  - CONTRAST
  - BRIGHTNESS
  - CHROMA
  - PHASE

  PIC SIZE menu
  - ZOOM
  - H WIDTH
  - V HEIGHT
  - H SHIFT
  - V SHIFT

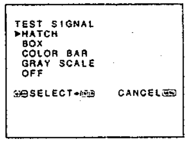
Using the Test Pattern

You can use the built-in test signal patterns to check the monitor.

1 Press MENU.
The main menu appears on the monitor screen.


MAIN MENU
▶PIC CONTROL
PIC SIZE
PIC MEMORY
CONFIG
REMOTE
RASTER ADJ
TEST SIGNAL
⊕⊖SELECT→ENTER
CANCEL MENU

2 Press SELECT+ or – to move the cursor (▶) to "TEST SIGNAL" and press ENTER.
The TEST SIGNAL menu appears on the monitor screen.


TEST SIGNAL
▶HATCH
BOX
COLOR BAR
GRAY SCALE
OFF
⊕⊖SELECT→ENTER
CANCEL MENU

3 Press SELECT+ or – to move the cursor (▶) to the desired test signal pattern and press ENTER.
The selected test signal appears on the monitor screen.
For details on each test signal pattern, see page 11(EN).

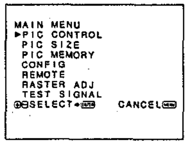
To restore the normal screen

Select OFF at the step **3** above.

Selecting the On-screen Language

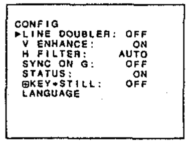
You can select the on-screen language among five languages.

1 Press MENU.
The main menu appears on the monitor screen.



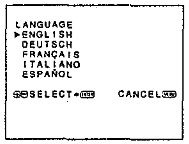
```
MAIN MENU
▶PIC CONTROL
 PIC SIZE
 PIC MEMORY
 CONFIG
 REMOTE
 RASTER ADJ
 TEST SIGNAL
⊕⊖SELECT•ENTER     CANCEL MENU
```

2 Press SELECT+ or – to move the cursor (▶) to "CONFIG" and press ENTER.
The CONFIG menu appears on the monitor screen.



```
CONFIG
▶LINE DOUBLER: OFF
 V ENHANCE:     ON
 H FILTER:    AUTO
 SYNC ON G:    OFF
 STATUS:        ON
 ⊕KEY•STILL:   OFF
 LANGUAGE
```

3 Press SELECT+ or – to move the cursor (▶) to "LANGUAGE" and press ENTER.
The following menu appears on the monitor screen.



```
LANGUAGE
▶ENGLISH
 DEUTSCH
 FRANÇAIS
 ITALIANO
 ESPAÑOL

⊕⊖SELECT•ENTER     CANCEL MENU
```

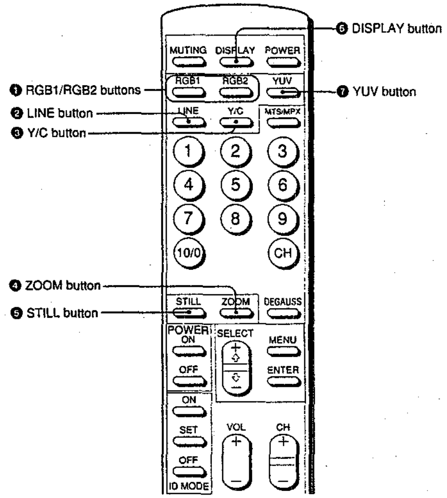
4 Press SELECT+ or – to move the cursor (▶) to desired language and press ENTER.
The on-screen language is switched to the one you selected.

5 Press MENU.
The menu returns to CONFIG menu.

Using the Remote Commander

When you use the Remote Commander supplied with the PGM-200R1A/200R1E/200R1U

You can directly operate for switching the input signal, still function, and on-screen information with the Remote Commander instead of using the menu.



❻ DISPLAY button
❶ RGB1/RGB2 buttons
❼ YUV button
❷ LINE button
❸ Y/C button
❹ ZOOM button
❺ STILL button
MUTING
DISPLAY
POWER
RGB1
RGB2
YUV
LINE
Y/C
MTS/MPX
1
2
3
4
5
6
7
8
9
10/0
CH
STILL
ZOOM
DEGAUSS
POWER
ON
OFF
SELECT
MENU
ENTER
ON
SET
OFF
ID MODE
VOL
CH

❶ RGB1/RGB2 buttons
Select the signal input from the RGB1 or RGB2 connectors.

❷ LINE button
Select the signal input from the VIDEO connector in the LINE connectors.

❸ Y/C button
Select the signal input from the Y/C jack in the LINE connectors.

❹ ZOOM button
Adjust the zoom. Each time you press the ZOOM button, the picture is magnified by two, three, and four times respectively.

❺ STILL button
Freezes a picture on the monitor screen.

❻ DISPLAY button
Displays the on-screen information on the monitor screen.

❼ YUV button
Select the component signal input from the RGB1 connectors.

When you use other Remote Commanders

The following operations can be controlled.

- Power on/off
- Input selection
- Menu operations
- Picture adjustments: contrast, phase and chroma
- On-screen display on/off (only for video monitors and TVs)

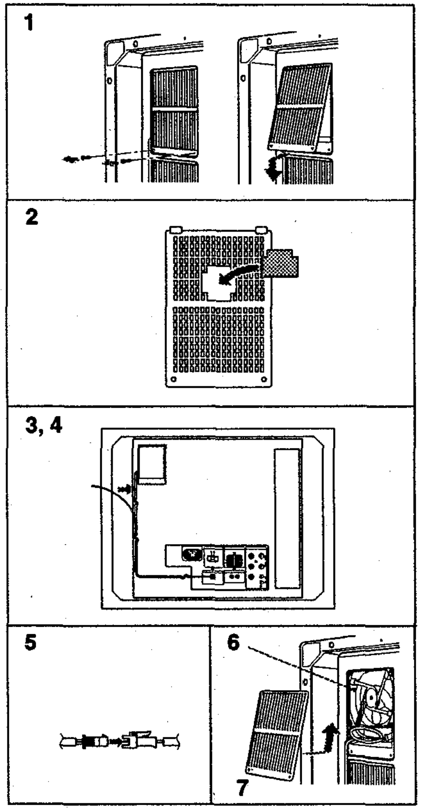
The available operations and the buttons to be used for each operation are limited depending on each Remote Commander. See the table below.

Remote Commander model		**RM-854**	**RM-1271**	**RM-PJ1292**	**RM-PJ1000**
REMOTE MODE setting		**TV**	**PJ**	**PJ**	**PJ**
Input selection	RGB1	RGB	A	A	A
	RGB 2	—	B	B	B
	LINE	LINE1	VIDEO	VIDEO	VIDEO
Menu operation	MENU	MENU	PAGE or ←	PAGE or ←	MENU or ←
	ENTER	ENTER	→	→	ENTER or →
	+	+	↑	↑	↑
	–	–	↓	↓	↓
Picture adjustment	Contrast	CONTRAST+/–	CONTR+/–	CONTR+/–	CONTR+/–
	Chroma	CHROMA+/–	COLOR+/–	COLOR+/–	COLOR+/–
	Phase	PHASE+/–	HUE+/–	HUE+/–	HUE+/–
On-screen information		DISPLAY	—	STATUS ON/OFF	STATUS ON/OFF

1-3. BKM-202FN

Before operating the unit, please read this manual thoroughly and retain it for future reference.

The BKM-202FN Ventilation Fan Unit is designed to be used with the PGM-200R1A/200R1E/200R1U Trinitron Color Graphic Monitor only. Do not use it for any other monitor as doing so many lead to breakdown or fire.
For the installation, consult with qualified Sony personnel.



Follow the steps below to install the Ventilation Fan Unit into the PGM-200R1A/200R1E/200R1U Trinitron Color Graphic Monitor.

Installing the Ventilation Fan Unit

Before installation, make sure that the power to all the equipment is off.

1 Remove the cover on the rear of the monitor
Remove the two screws with a screwdriver.

2 Stick the supplied cushion on the rear of the cover.

3 Connect the DC plug of the supplied cord to the 12V DC OUT socket on the rear of the monitor.

4 Install the cord to the monitor along with the groove.

5 Connect the other end of the cord to the Ventilation Fan Unit.

6 Install the Ventilation Fan Unit into the monitor with the SONY mark facing out in the proper direction.

7 Attach the cover with the cushion.
- Tighten the two screws you removed in step **1** with a screwdriver.
- Attach the cover after putting the excessive cord under the cover to make sure that the cord is not slack.

Supplied Accessories

The following spare screws are supplied.
+RK M3 x 8 (2)

(Real size)

1-4. SS-X7A

Features

The SS-X7A is a two-way speaker system which adopts the corn-type woofer and tweeter.
Especially, the speaker system is designed for use with a Sony Trinitron[1] color monitor such as PVM-2950Q/2950QM and PGM-200R1A/200R1E/200R1U. The metal-mesh grille is suitable for releasing the sound. You can enjoy the high quality stereo sound regardless of its small-size body.

---

[1] Trinitron is a registered trademark of Sony corporation.

Precautions

Operating and storage locations

Avoid operating or storing the product in the following locations.
- Extremely hot or cold places (operating temperature: –5°C to +45°C [23°F to 113°F])
- In direct sunlight for long periods, or close to heating equipment
- Damp or dusty places
- Where it is exposed to rain
- Locations subject to strong vibration

Care

- Clean the cabinet with a soft, dry cloth. If it is very dirty, use a cloth dampened with a small quantity of neutral detergent, then wipe dry.
- Avoid the use of volatile solvents such as alcohol, benzene, and thinners. They may damage the surface finish, or impair the operation of the shutter adaptor.

Ventilation

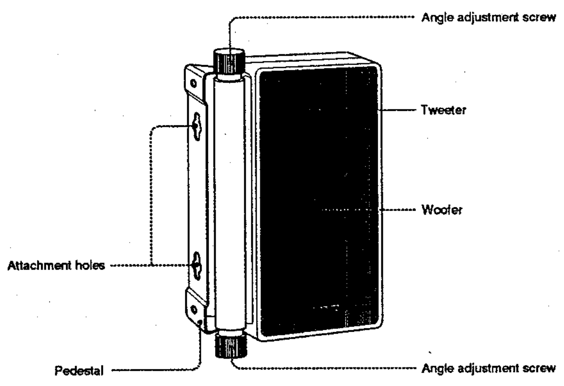
Do not wrap the unit in a cloth, etc., during operation. This may cause the internal temperature to rise excessively and the unit to malfunction.

Miscellaneous

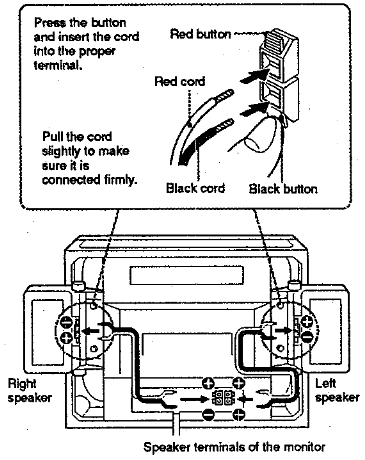
- Be careful not to spill water or other liquids on the unit or allow combustible or metallic objects inside the body. If used with foreign objects inside, the unit is liable to fail or cause a fire or an electric shock.
- If the product is transported or shipped, repack it as originally packed at the factory, or in materials equal in quality.

In the event of any problems with the operation of the unit, contact your Sony service representative.

Parts Identification


Angle adjustment screw
Tweeter
Woofer
Attachment holes
Pedestal
Angle adjustment screw

Connecting to the Color Monitor


Press the button and insert the cord into the proper terminal.
Red button
Red cord
Pull the cord slightly to make sure it is connected firmly.
Black cord
Black button
Right speaker
Left speaker

Speaker terminals of the monitor

Before connecting the speaker system, be sure to turn off the connected equipment such as a color monitor or an amplifier.

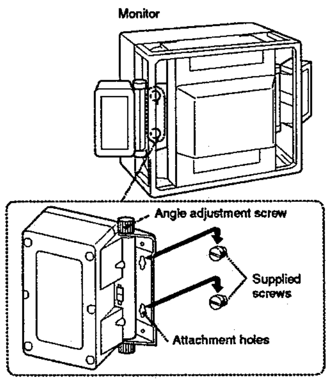
Connect one end of the speaker cord to the speaker terminals on the monitor and the other end to the speaker terminals on the speaker.

The right speaker is connected to the right speaker terminals on the monitor, and the left speaker is to the left terminals. Match the polarity of the speaker terminals with the polarity of the speaker terminals on the monitor, ⊕ to ⊕ with the red cord and ⊖ to ⊖ with black cord.

Notes

- Be careful not to short-circuit the speaker terminals according to the wire sticking out of the insulation.
- Connect the speaker cords with correct polarity. Correct ⊕⊖ connections of both speaker systems insures proper inphase operation. If the speaker system is out-of-phase, the bass tones seem to be missing and the position of the sound sources become obscure.
- When connecting to a monitor with a bass boost function, turn on the bass boost function.
- Do not connect the speakers to both an amplifier and a monitor at the same time. Otherwise, the excessive electric current may flow from the amplifier to the monitor via the speader cord, which may damage the monitor.

Installation


Monitor
Angle adjustment screw
Supplied screws
Attachment holes

1. Insert the supplied screws (2 each for the right/left side) into the attachment holes of the monitor, and tighten the screws completely by using a coin.
2. Loosen the angle adjustment screws and open the pedestal. Hook the speaker to the screws which is inserted in step **1**.
   Push down the speaker until it stops, and fix it firmly.
3. Adjust the angle of the speaker, and tighten the adjustment angle screws.

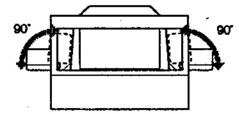
To remove the speakers

Take off the speaker pulling it up slightly.

The SS-X7A can be installed in the following Trinitron color monitors. Be sure to use the supplied screws for the installation.
PVM-2030/2130QM/2950Q/2950QM and PGM-200R1A/200R1E/200R1U.

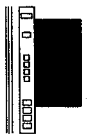
Notes

- This system cannot be adjusted at less than 90°. Do not push the back of the speaker attached to the monitor at this situation.



PVM-2950Q/PVM-2950QM/PGM-200R1A/PGM-200R1E/PGM-200R1U

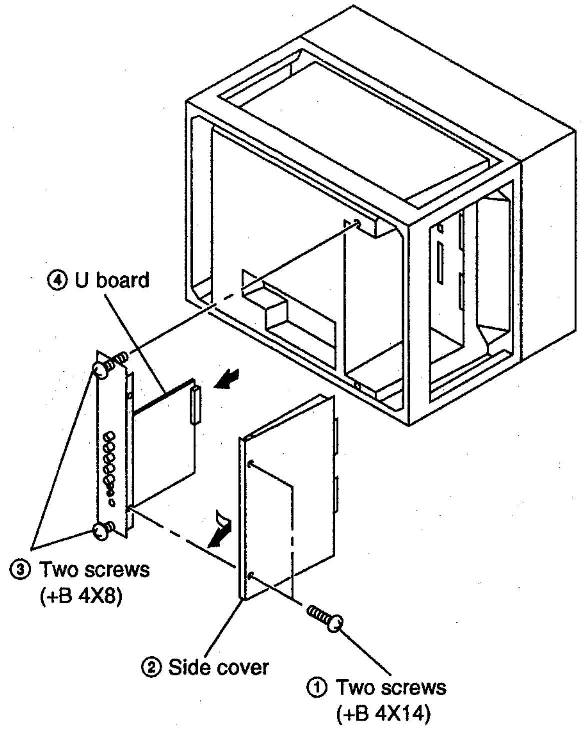
- Do not lift up the monitor with holding the speakers attached to the monitor. It may cause personal injury that the speakers come off from the monitor.
- Install the speaker with the tweeter on the top. (Not to install it with the SONY mark upside down.)



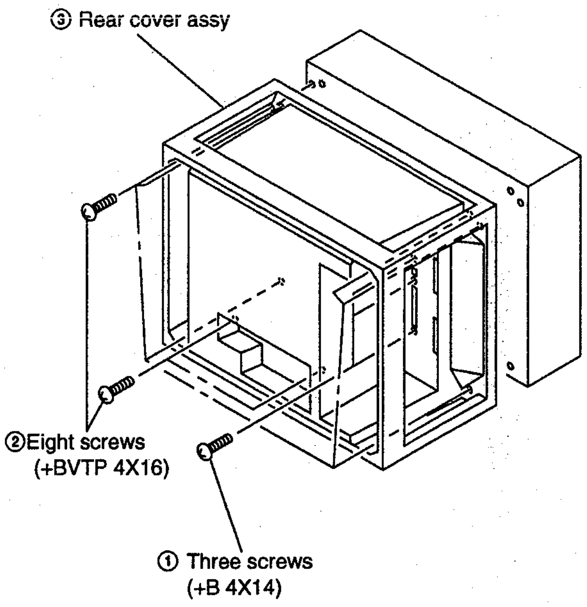
SECTION 2
DISASSEMBLY

PGM-200R1U/200R1E/200R1A

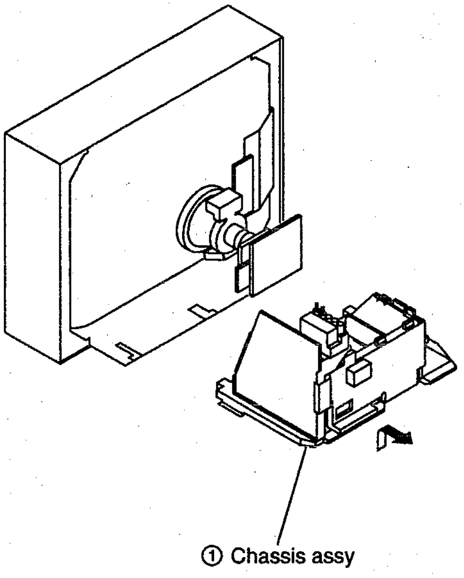
2-1. U BOARD REMOVAL


④ U board
③ Two screws
(+B 4X8)
② Side cover
① Two screws
(+B 4X14)

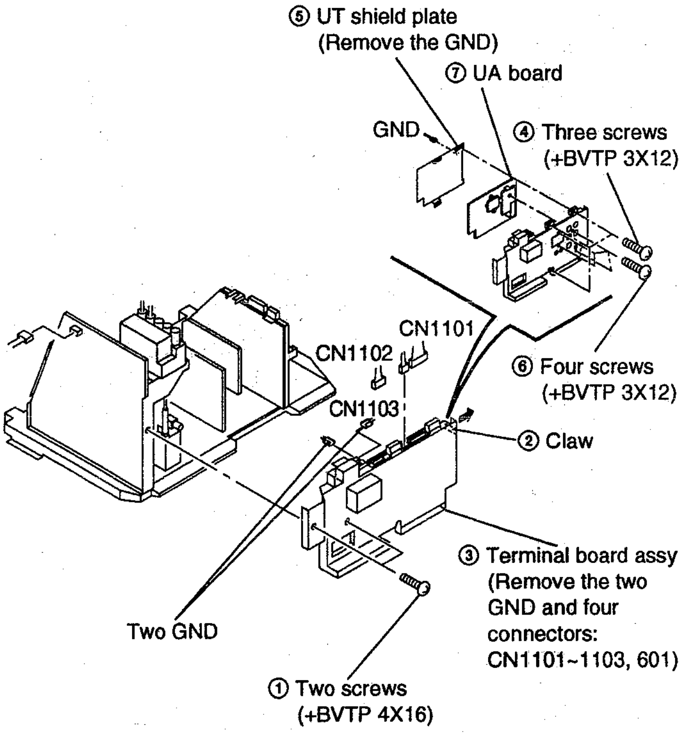
2-2. REAR COVER ASSY REMOVAL


③ Rear cover assy
②Eight screws
(+BVTP 4X16)
① Three screws
(+B 4X14)

2-3. CHASSIS ASSY REMOVAL


① Chassis assy

2-4. UA BOARD REMOVAL


⑤ UT shield plate
(Remove the GND)
⑦ UA board
GND
④ Three screws
(+BVTP 3X12)
CN1101
CN1102
CN1103
⑥ Four screws
(+BVTP 3X12)
② Claw
③ Terminal board assy
(Remove the two
GND and four
connectors:
CN1101~1103, 601)
Two GND
① Two screws
(+BVTP 4X16)

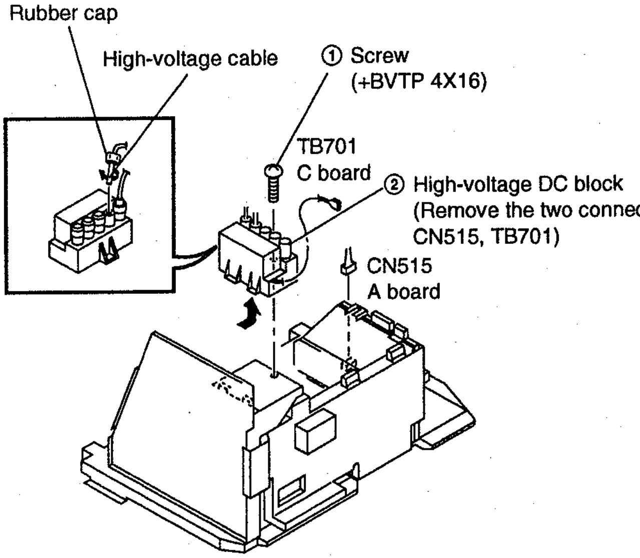
2-5. HIGH-VOLTAGE DC BLOCK REMOVAL

HIGH-VOLTAGE CABLE REMOVAL

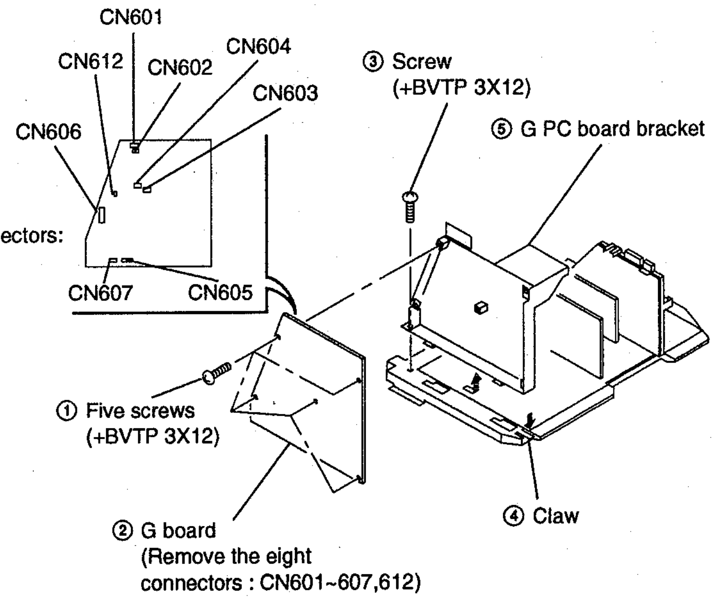
1) Shift rubber cap.

2) Pressing high-voltage cable, Turn 90°

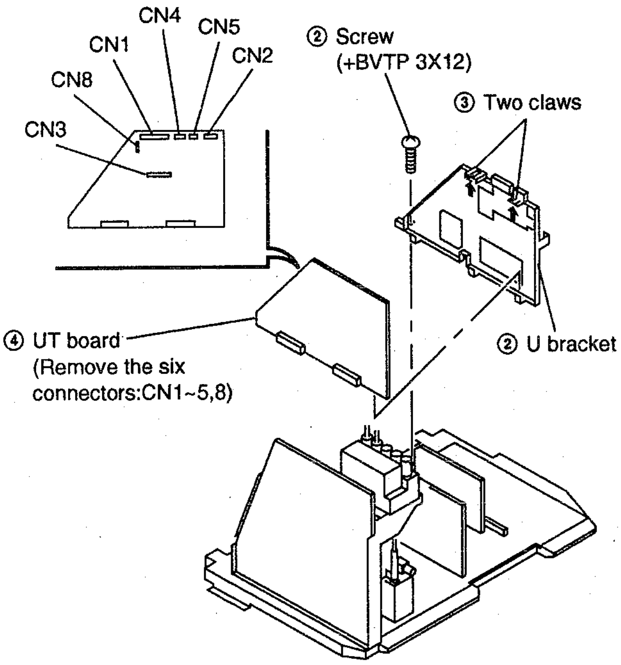
3) Pull out a high-voltage cable


Rubber cap
High-voltage cable
① Screw
(+BVTP 4X16)
TB701
C board
② High-voltage DC block
(Remove the two connectors:
CN515, TB701)
CN515
A board

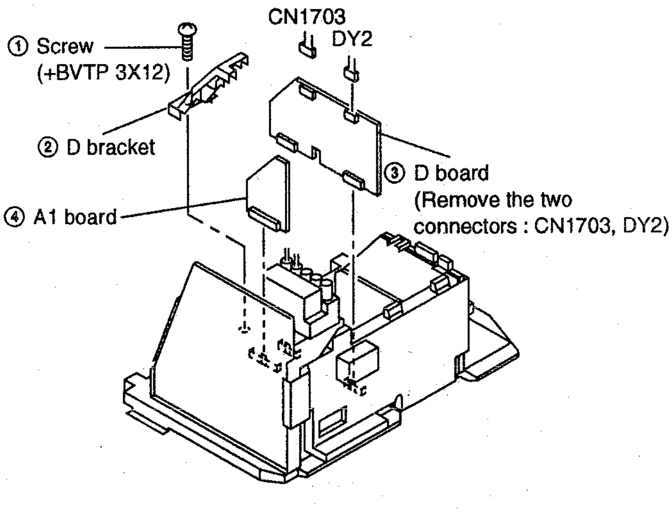
2-6. G BOARD AND G PC BOARD BRACKET REMOVAL


CN601
CN612
CN602
CN604
CN603
CN606
CN607
CN605
③ Screw
(+BVTP 3X12)
⑤ G PC board bracket
① Five screws
(+BVTP 3X12)
② G board
(Remove the eight
connectors : CN601~607,612)
④ Claw

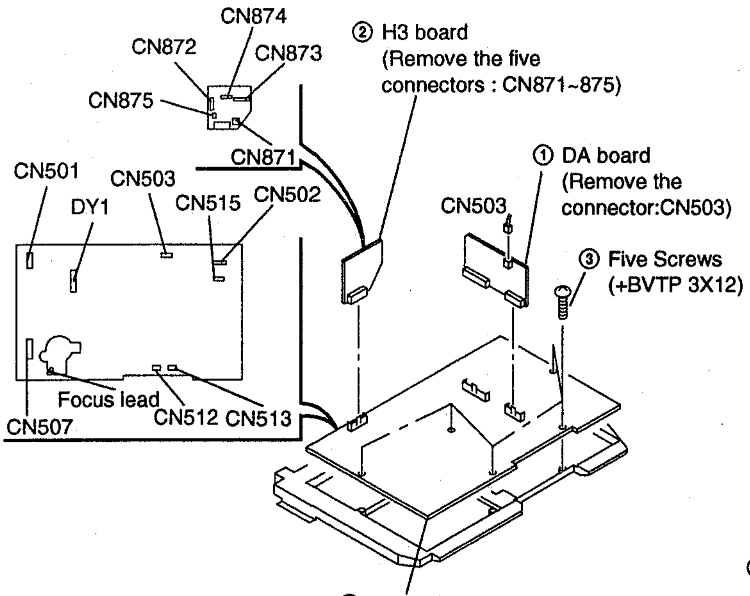
2-7. UT BOARD REMOVAL


CN4
CN1
CN5
CN2
CN8
CN3
② Screw
(+BVTP 3X12)
③ Two claws
④ UT board
(Remove the six
connectors:CN1~5,8)
② U bracket

2-8. D AND A1 BOARDS REMOVAL


① Screw
(+BVTP 3X12)
CN1703
DY2
② D bracket
③ D board
(Remove the two
connectors : CN1703, DY2)
④ A1 board

2-9. DA, H3 AND A BOARDS REMOVAL


CN874
CN872
CN873
CN875
CN871
CN501
CN503
DY1
CN515
CN502
CN503
Focus lead
CN507
CN512 CN513

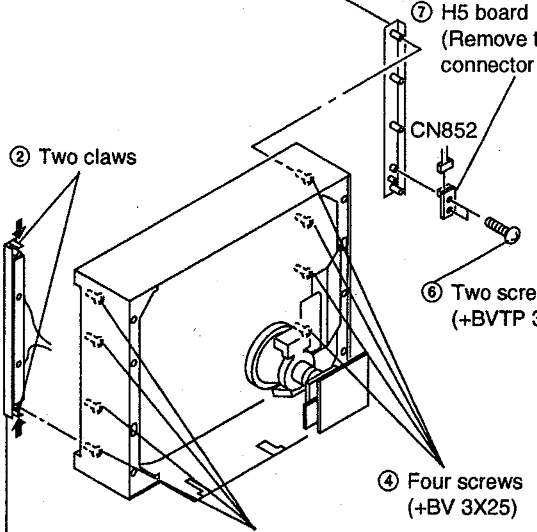
① DA board
(Remove the connector:CN503)

② H3 board
(Remove the five connectors : CN871~875)

③ Five Screws
(+BVTP 3X12)

④ A board
(Remove the focus lead and eight connectors : CN501~503, 507, 512, 513, 515, DY1)

2-10. KEY BOARD UNIT AND H5 BOARD REMOVAL



① Four screws
(+BV 3X25)

② Two claws

③ Key board unit

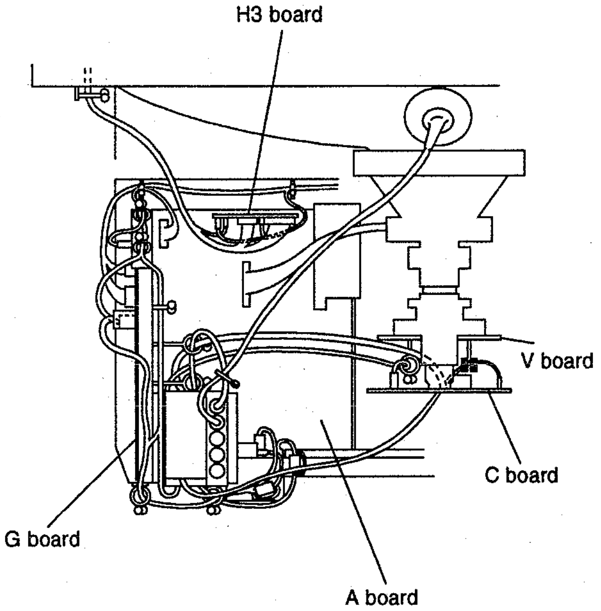
④ Four screws
(+BV 3X25)

⑤ Blind panel assy

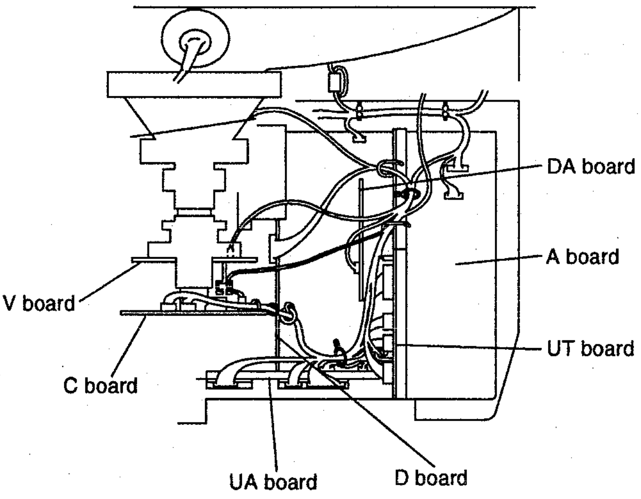
⑥ Two screws
(+BVTP 3X12)

⑦ H5 board
(Remove the connector : CN852)

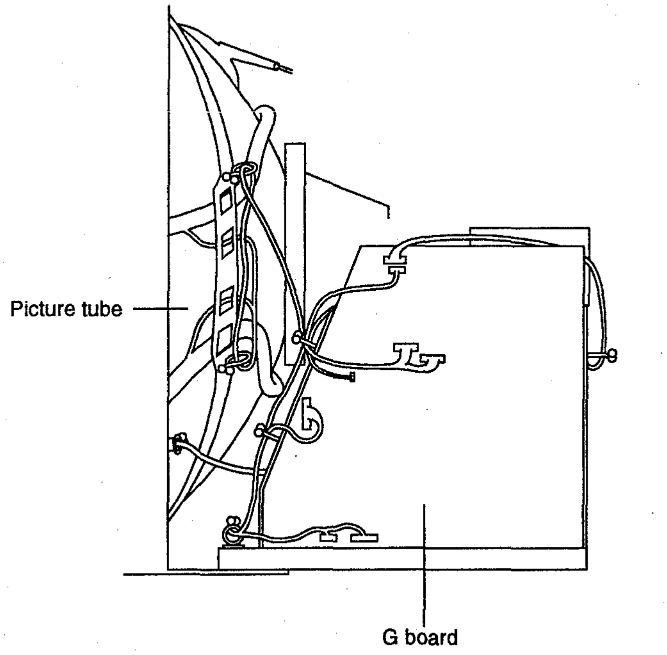
2-11-1. HARNESS LOCATION 1 TOP VIEW (RIGHT)


H3 board
V board
C board
G board
A board

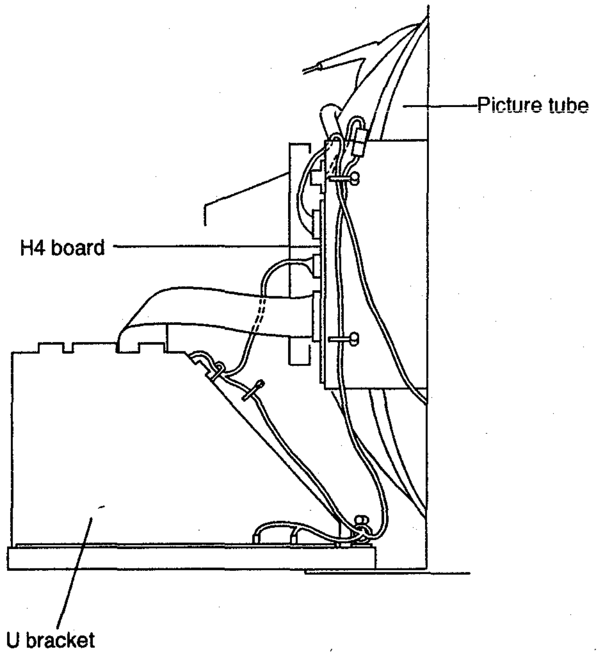
2-11-2. HARNESS LOCATION 2 TOP VIEW (LEFT)


DA board
A board
V board
UT board
C board
UA board
D board

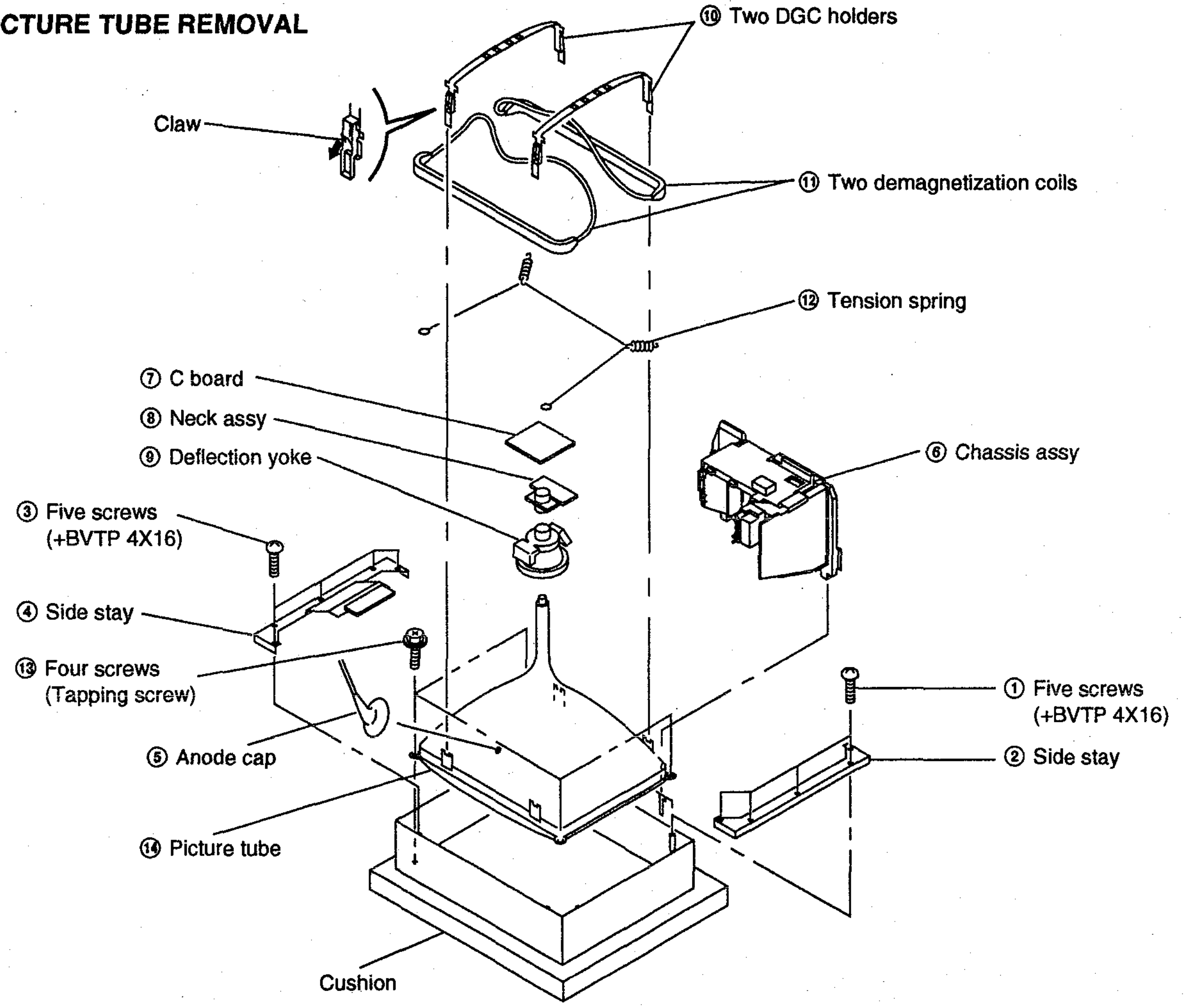
2-11-3. HARNESSS LOCATION 3 SIDE VIEW (RIGHT)


Picture tube
G board

2-11-4. HARNESSS LOCATION 4 SIDE VIEW (LEFT)

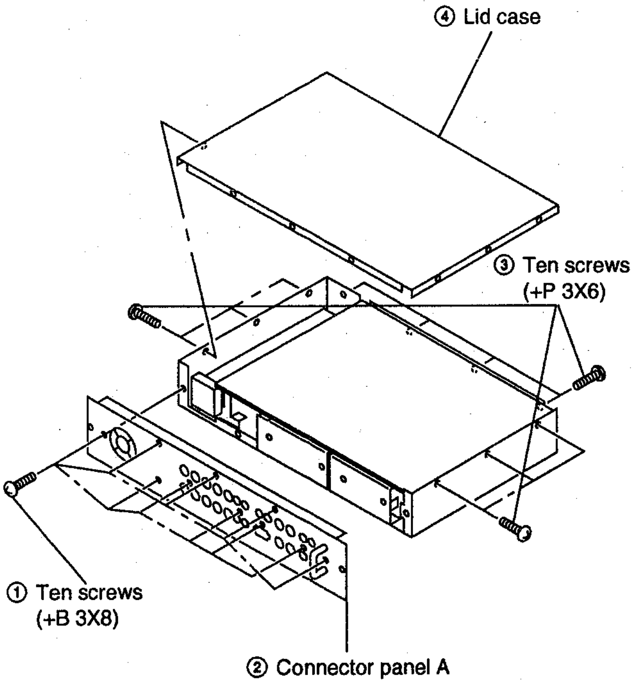

Picture tube
H4 board
U bracket

2-12. PICTURE TUBE REMOVAL

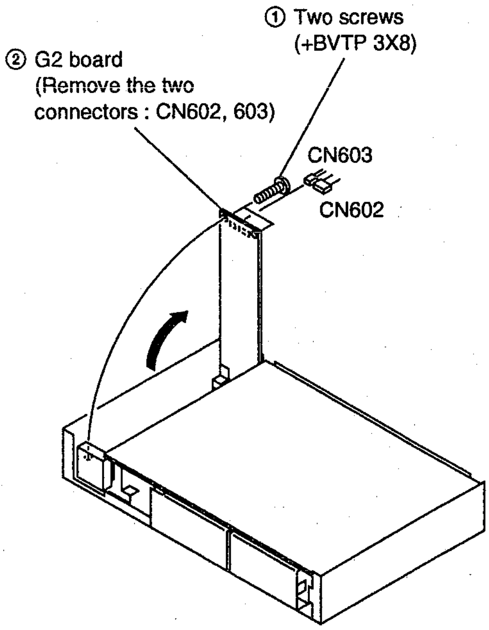

⑩ Two DGC holders
Claw
⑪ Two demagnetization coils
⑫ Tension spring
⑦ C board
⑧ Neck assy
⑨ Deflection yoke
⑥ Chassis assy
③ Five screws (+BVTP 4X16)
④ Side stay
⑬ Four screws (Tapping screw)
① Five screws (+BVTP 4X16)
⑤ Anode cap
② Side stay
⑭ Picture tube
Cushion

BKM-201SC

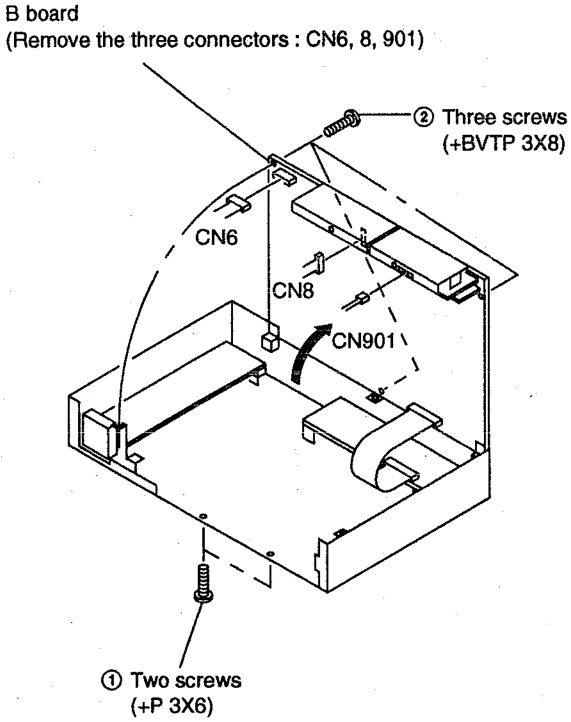
2-13. CONNECTOR PANEL A AND LID CASE REMOVAL


④ Lid case
③ Ten screws (+P 3X6)
① Ten screws (+B 3X8)
② Connector panel A

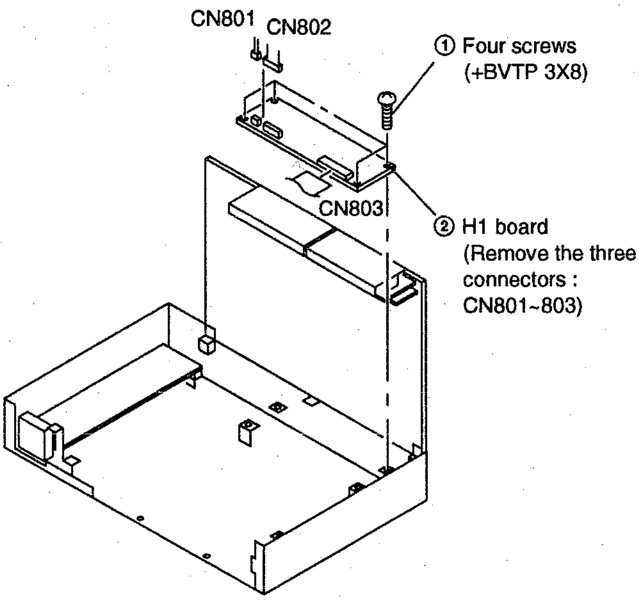
2-14. G2 BOARD REMOVAL


① Two screws (+BVTP 3X8)
② G2 board (Remove the two connectors : CN602, 603)
CN603
CN602

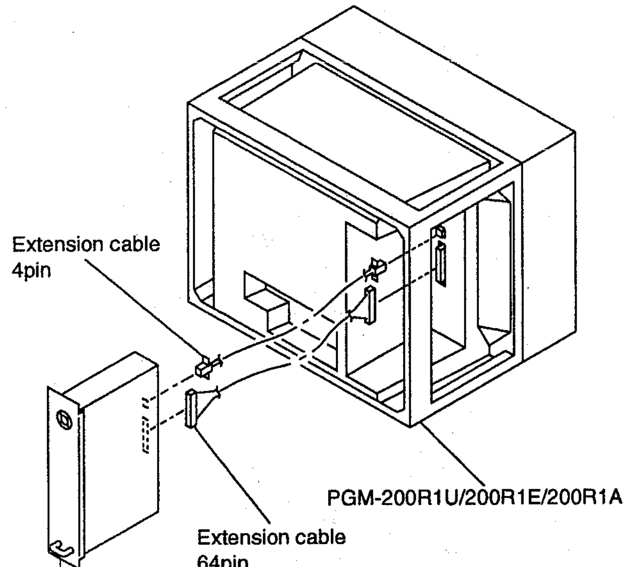
2-15. B BOARD REMOVAL


③ B board (Remove the three connectors : CN6, 8, 901)
② Three screws (+BVTP 3X8)
CN6
CN8
CN901
① Two screws (+P 3X6)

2-16. H1 BOARD REMOVAL

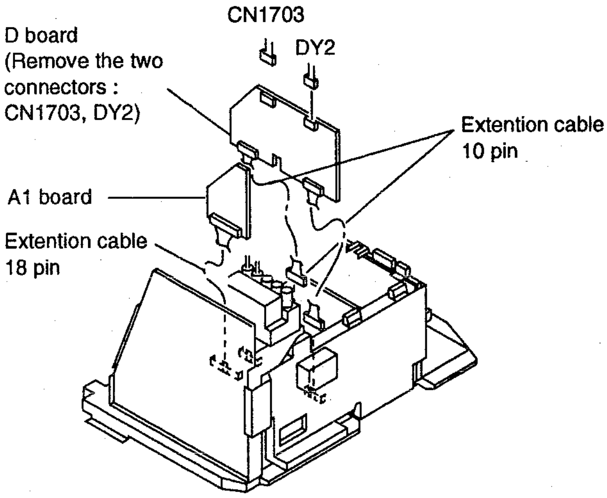

CN801
CN802
① Four screws (+BVTP 3X8)
CN803
② H1 board (Remove the three connectors : CN801~803)

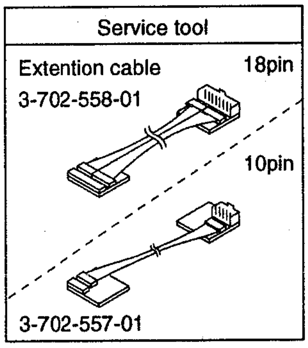
2-17. EXTENSION CABLE


Extension cable
4pin
PGM-200R1U/200R1E/200R1A
Extension cable
64pin
BKM-201SC

Extension cable :
A-1501-146-A or
A-1501-147-A

*Extention cable also can be used while the rear cover had removed. And 64 pin cable can be used for U board extention.

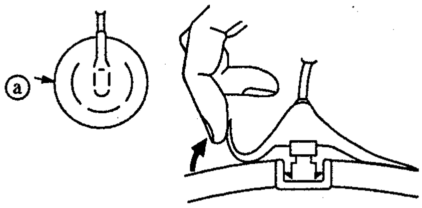

CN1703
DY2
D board
(Remove the two
connectors :
CN1703, DY2)
Extention cable
10 pin
A1 board
Extention cable
18 pin


Service tool
Extention cable
18pin
3-702-558-01
10pin
3-702-557-01

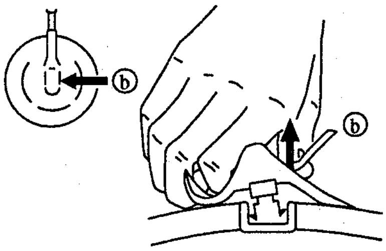
• REMOVAL OF ANODE-CAP

NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

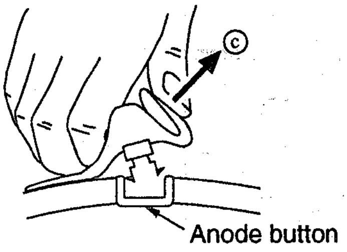
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



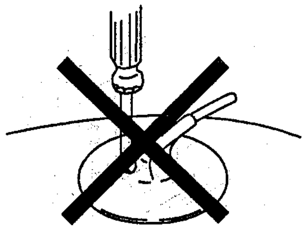
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

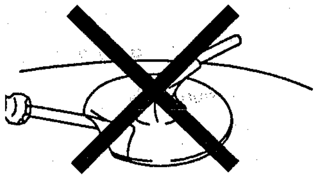
• HOW TO HANDLE AN ANODE-CAP

① Don't hurt the surface of anode-caps with sharp shaped material!

② Don't press the rubber hardly not to hurt inside of anode-caps! A material fitting called as shatter-hook terminal is built in the rubber.

③ Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3
SET-UP ADJUSTMENTS

3-1. Operating condition

1. Preparation of signals

Signal mode

Unless otherwise specified, use the VGA Graphic signal.

- VGA Graphic (Note): Table 3-1
- VGA Text: Table 3-2
- Double-speed NTSC (Note): Table 3-3
- Double-speed PAL: Table 3-4

Note: The scan size for inputting the VGA Graphic signal should be "UNDER (under scan)." The scan size for inputting the double-speed NTSC signal should be "OVER (over scan)." The VGA Graphic and double-speed NTSC have the identical signal frequency and Sync polarity. Since signals are not discriminated automatically, be sure to change the scan size when inputting the two signals mentioned above.

Table 3-1 VGA Signal Timing Table (VGA 640 x 480 : Graphic)

HORIZONTAL fH (kHz) : 31.469			VERTICAL fV (Hz) : 59.94	
(units)	usec.	pixels	(units)	lines
TOTAL	31.778	800	TOTAL	525
ACTIVE	25.422	640	ACTIVE	480
BLANKING	6.356	160	BLANKING	45
F. PORCH	0.636	16	F. PORCH	10
SYNC	3.813	96	SYNC	2
B.PORCH	1.907	48	B. PORCH	33
SYNC. POL	Negative		SYNC. POL	Negative

MODE	VGA480
MODE NAME	VGA 640 x 480
RESOLUTION	640 dots x 480 lines
CLOCK	25.175 (MHz)
Non-INTERACE	

Table 3-2 VGA Signal Timing Table (VGA 720 x 400 : Text)

HORIZONTAL fH (kHz) : 31.469			VERTICAL fV (Hz) : 70.086	
(units)	usec.	pixels	(units)	lines
TOTAL	31.778	900	TOTAL	449
ACTIVE	25.422	720	ACTIVE	400
BLANKING	6.356	180	BLANKING	49
F. PORCH	0.636	18	F. PORCH	12
SYNC	3.813	108	SYNC	2
B.PORCH	1.907	54	B. PORCH	35
SYNC. POL	Negative		SYNC. POL	Positive

MODE	VGA400
MODE NAME	VGA 720 x 400
RESOLUTION	720 dots x 400 lines
CLOCK	28.322 (MHz)
Non-INTERACE	

Table 3-3 Double-Speed NTSC Signal Timing Table

HORIZONTAL fH (kHz) : 31.469			VERTICAL fV (Hz) : 59.94	
(units)	usec.	pixels	(units)	lines
TOTAL	31.778	800	TOTAL	525
ACTIVE	24.389	614	ACTIVE	450
BLANKING	7.388	186	BLANKING	75
F. PORCH	0.953	24	F. PORCH	18
SYNC	3.813	96	SYNC	2
B.PORCH	2.622	60	B. PORCH	46
SYNC. POL	Negative		SYNC. POL	Negative

MODE	Double-speed NTSC
MODE NAME	Double-speed NTSC
RESOLUTION	614 dots x 450 lines
CLOCK	25.175 (MHz)
Non-INTERACE	

Table 3-4 Double-Speed PAL Signal Timing Table

HORIZONTAL fH (kHz) : 31.25			VERTICAL fV (Hz) : 50.00	
(units)	usec.	pixels	(units)	lines
TOTAL	32.000	640	TOTAL	625
ACTIVE	24.300	486	ACTIVE	535
BLANKING	7.700	154	BLANKING	85
F. PORCH	1.200	24	F. PORCH	20.5
SYNC	2.300	46	SYNC	2.5
B.PORCH	4.200	80	B. PORCH	53
SYNC. POL	Negative		SYNC. POL	Negative

MODE	Double-speed PAL
MODE NAME	Double-speed PAL
RESOLUTION	480 dots x 540 lines
CLOCK	20.000 (MHz)
Non-INTERACE	

2. AC input power setting

1. Set the supply voltage according to Table 3-5.
2. When a slidack is used, set the RECTIFY in the OUT position.

Table 3-5 AC Supply Voltage Setting

Model	Set voltage	
	NF power supply	Slidack (Note 1)
PGM-200R1U (U/S)	AC120 ± 2V 50/60 distortion factor : 3%	RECTIFY OUT (Voltage between D601 +/-) 150 ± 5VDC
PGM-200R1E (AEP) PGM-200R1A (AUS)	AC240 ± 2V 50/60 distortion factor : 3%	RECTIFY OUT (Voltage between D601 +/-) 240 ± 5Vrms (Within AC + DC range)
PGM-200R1J (J)	AC100 ± 2V 50/60 distortion factor : 3%	RECTIFY OUT (Voltage between D601 +/-) 125 ± 5VDC

Note: For setting, the SET POWER should be ON in the standard status (Table 3-8). (See page 42)

3-2. Preparation for operation

1. AC changeover switch setting

Set the AC changeover switch on the back of the set according to the Table 3-6 for respective destinations.

Table 3-6

Destination of set	VOLTAGE SELECTOR
PGM-200R1U (U/C)	100-120
PGM-200R1J (J)	100-120
PGM-200R1E (AEP)	220-240
PGM-200R1A (AUS)	220-240

2. Neck assy mounting

Mount the neck assy at the specified location.

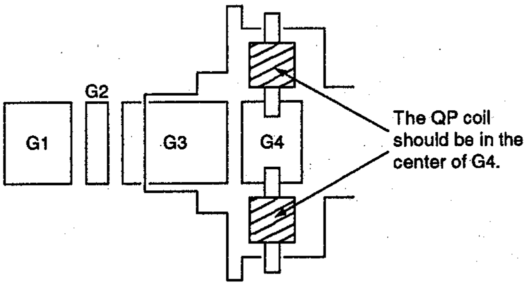


Fig.3-1

3-3. Adjustment of Y separation axis correction magnets

1. Bring the deflection yoke into contact with the CRT and set the yoke upright.
2. Open the Y separation axis correction magnets on the neck assy so that they will be vertically symmetrical. The pin/barrel quantity of the upper and lower pins should be identical.
3. Return the deflection yoke to the original position.

4. Lock the Y separation axis correction magnets with a white paint.

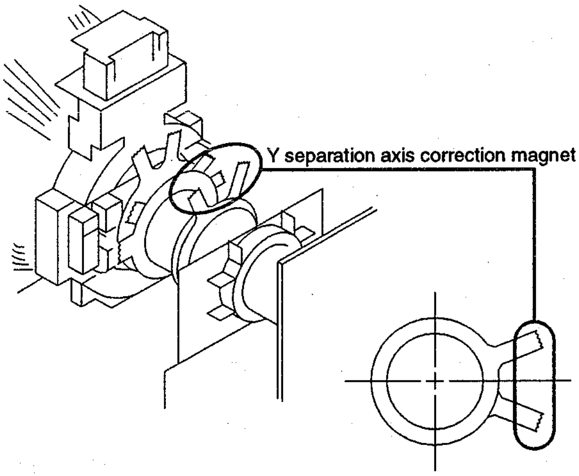
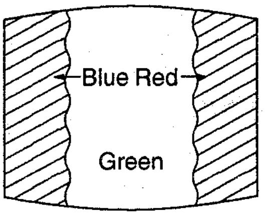

Y separation axis correction magnet

Fig.3-2

3-4. Landing adjustment

1. Input all-white only to a G signal.
2. Open fully the DY so that monochromatic green will appear on the screen.
3. Turn the purity knobs. Enlarge the size in the service mode when the raster is lacking partly.
4. Turn the deflection yoke clockwise and counterclockwise to bring the green zone to the center.
5. Gradually retreat the deflection yoke to set the screen horizontally.
6. Secure the deflection yoke with a retention device so that the entire screen will be green.


Blue Red
Green

Purity adjustment

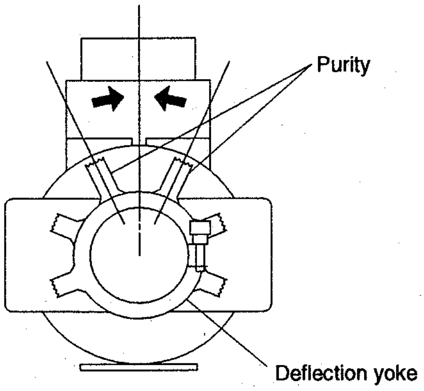

Purity
Deflection yoke

Fig.3-3

3-5. Rough adjustment of static convergence

1. Receive the dot hatch and set the CONTRAST at 50% and the BRIGHTNESS at 30%.
2. Set the V.STAT Mg and BMC Mg in the standard status.

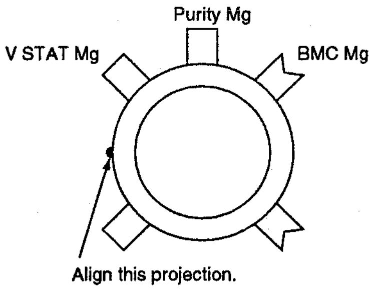

Purity Mg
V STAT Mg
BMC Mg
Align this projection.

Fig.3-4 **Standard status**

3. Turn the H.STAT VR (C board) to a maximum so that the R spot will go to the left-hand side of G.
4. Turn the V.STAT Mg to correct the vertical misalignment of R and B dots in the center of the screen. While maintaining "a = b," change the degree of opening.

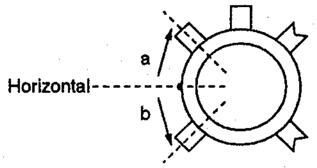

a
Horizontal
b

Fig.3-5

5. Turn the BMC Mg to equalize the horizontal misalignment of R and B dots with respect to the G dot in the center of the screen. While maintaining "a = b," change the degree of opening.

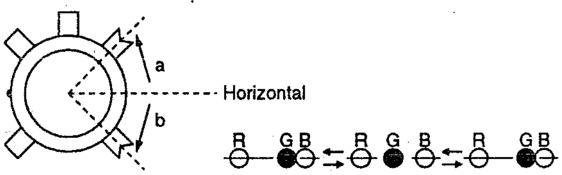

a
Horizontal
b
R GB ⇆ R G B ⇆ R GB

Fig.3-6

6. Turn the two BMC Mgs at the same time to correct the vertical misalignment of RGB dots. While maintaining "a," turn the two sheets.

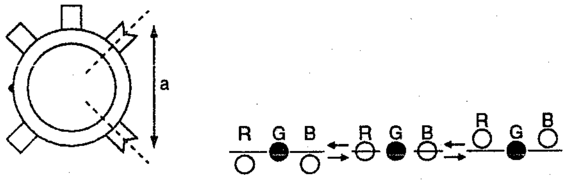

a
R G B
R G B
R G B

Fig.3-7

7. The movement of dots by menas of the V.STAT Mg and BMC Mg affects each other, so control tracking properly with respect to items 4 to 6.

Note: The adjusting direction should be east or west.

8. Turn the H.STAT VR to concentrate R.G.B. dots in the center of the screen at one point.

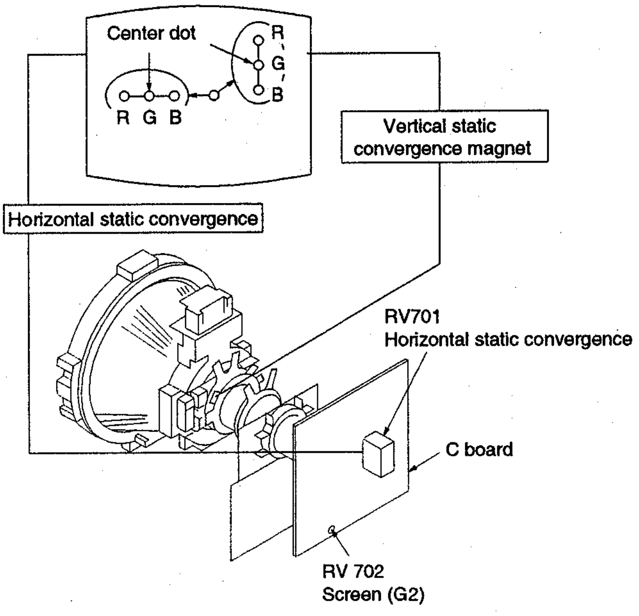

Center dot
R
G
B
R G B
Vertical static convergence magnet
Horizontal static convergence
RV701
Horizontal static convergence
C board
RV 702
Screen (G2)

Fig.3-8

3-6. Adjustment of static convergence

1. After standard setting, set the CONTRAST at 50%.
2. Move the deflection yoke up and down so that the moving distance of the upper and lower pins will be identical. Adjust the deflection yoke for ATAC screen so that the vertical line in the neck section will be in the center of the point. (Hunting in the pink and green zones is permissible.)
3. Insert the deflection yoke spacer between the deflection yoke and funnel to secure the deflection yoke. (Fig.3-9)

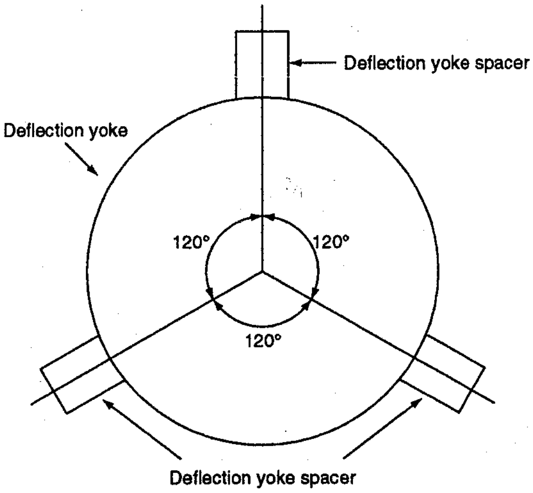

Deflection yoke spacer
Deflection yoke
120°
120°
120°
Deflection yoke spacer

Fig.3-9 Deflection yoke spacer inserting positions

4. Adjust the BMC by means of the BMC Mg (or by mounting the BMC Mg on the deflection yoke).
5. Adjust the H.STAT VR and V.STAT Mg.

3-7. V-TILT adjustment

1. Receive the dot hatch.
2. Mount the TLV correction plate on the deflection yoke. Correct the vertial conversion error (V-TILT) of red and blue at the upper and lower edges of the Y-axis.

Note:
- Use either 0.4 mm or 0.7 mm correction plate, whichever is appropriate.
- Do not use the correction plate when the conversion error is not substantial.
- Use the larger correction plate when the indication is more than 2 mm away from the center.

3. Apply RTV to the TLV correction plate.

3-8. Adjustment of dynamic convergence

1. Convergence adjustment in the peripheral section of the screen

1. Use the horizontal static convergence VR (H.STAT) to adjust the horizontal convergence in the center of the screen.
2. Set the system in the service mode, and conduct the dynamic convergence adjustment shown below.
   (Service mode: DISPLAY → 5 → VOL+ → POWER : Press the buttons shown above continuously.)
   Refer to Table 3-7 for selection of adjusting items for dynamic convergence.

Table 3-7

	Adjustment item	Adjustment range
01	DC SHIFT (H. STAT)	000-063
02	H. AMP	000-063
03	H. TILT	000-063
04	UP. Y. BOW	000-063
05	UP. C. BOW	000-063
06	UP. TILT	000-063
07	LO. Y. BOW	000-063
08	LO. C. BOW	000-063
09	LO. TILT	000-063

3. Press 1 and 4 on the remote controller for item selection. Use buttons 3 and 6 for adjustment.
   1) Y.BOW adjustment on the upper side of the screen (UP.Y.BOW)

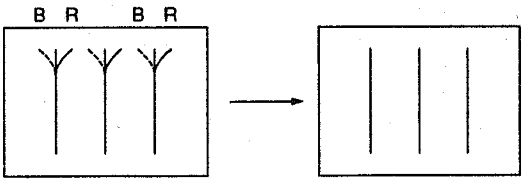


Fig.3-10

   2) Y.BOW adjustment on the lower side of the screen (LO.Y.BOW)

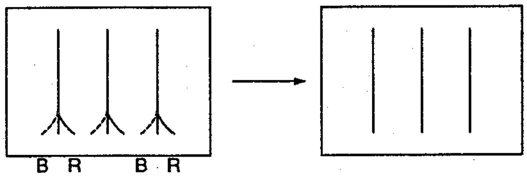


Fig.3-11

   3) H.AMP adjustment (H.AMP)

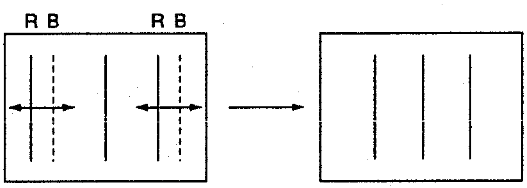


Fig.3-12

   4) TILT adjustment (H.TILT)

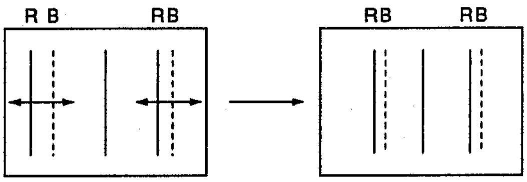


Fig.3-13

   5) C.BOW adjustment on the upper side of the screen (UP.C.BOW)

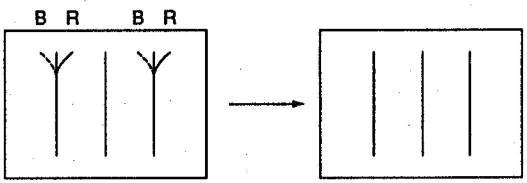


Fig.3-14

   6) TILT adjustment on the upper side of the screen (UP.TILT)

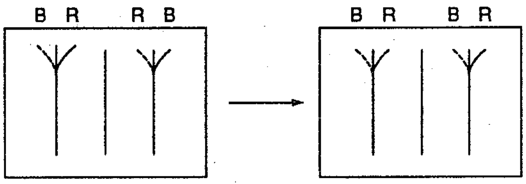


Fig.3-15

   7) C.BOW adjustment on the lower side of the screen (LO.C.BOW)

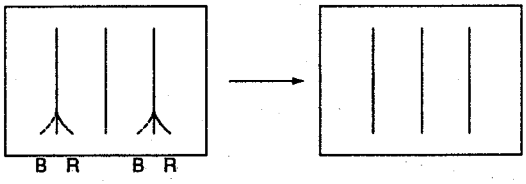


Fig.3-16

8) TILT adjustment on the lower side of the screen (LO.TILT)

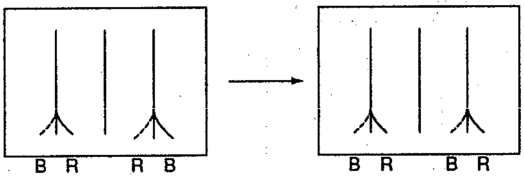


Fig.3-17

4. If there is a conversion error in the corners of the screen, use the permalloy for adjustment.

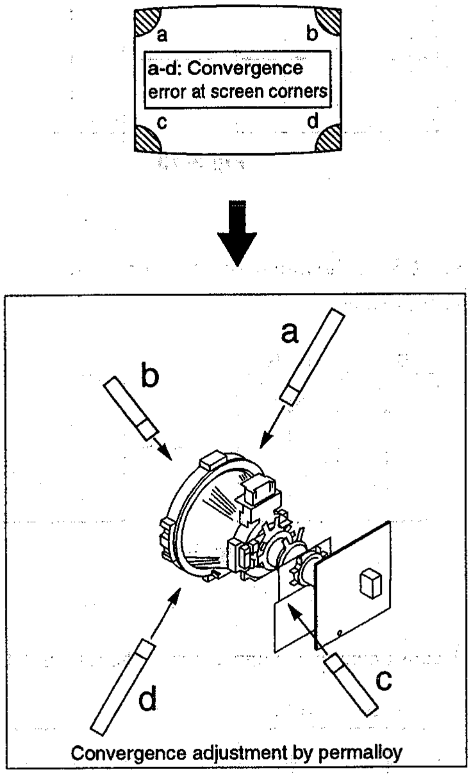

a
b
a-d: Convergence error at screen corners
c
d
a
b
d
c
Convergence adjustment by permalloy

Fig.3-18

3-9. Focus adjustment

1. Set the RV901 on the V board in the mechanical center.
2. Focus the center of the screen with the focus knob on the flyback transformer.

Note : Set the focus knob, which substantially affects the convergence and white balance, in the fine adjustment level.

3. Finely adjust the RV901 on the V board and secure it at a location where the focus on the right and left balances.
4. Turn the focus knob on the flyback transformer to ensure optimal balance in the center and corners of the screen. Top priority should be given to the center focus.

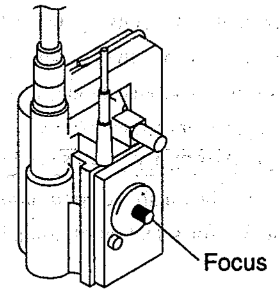


Fig.3-19

3-10. G2 adjustment

1. Set the contrast and brightness in the standard status.
2. Connect the oscilloscope to the cathode.
3. Remove the CN701 and connect an external power supply to pins ②, ③, and ④.
4. Make adjustment so that cathodes R, G, and B on the C board will be 165 ± 2VDC, respectively.
5. Under such conditions, adjust the RV702 on the C board so that the bright line on the screen is about to disappear.

3-11. White balance adjustment

1. Input the gray scale and select a 9300K mode via the menu on the screen. At that time, set the user-controlled contrast in the MIN position and the BRIGHT in the reset status.
2. Select the BRIGHT in the VIDEO for computer BUS adjustment, and cut off the OIRE so that 5IRE will be lit slightly.
3. Switch the signal to an all-white signal, and change the signal level so that the brightness in the center of the CRT will be 10 nit. When fine adjustment of brightness is impossible by the signal level, the user-controlled contrast may be used.
4. Move the G and B cutoffs in the VIDEO for computer BUS adjustment so that the color temperature will be 9300K + 8MPCD. Within 2JND of 9300K + 8MPCD
5. Set the all-white signal level at 100 IRE. Within 2JND of 9300K + 8MPCD
6. Move the G and B drives in the VIDEO for computer BUS adjustment so that the color temperature will be 9300K + 8MPCD. Standard:
   C/O side: Within 2JND
   H/L side: Within 2JND

7. Change the signal level again to set the brightness at 10 nit. When the color temperature is incorrect, repeat operations 4 to7.
8. Return to 1. to see if the BRIGHT is in position. If not, repeat operations 1 to 7.
9. Save the adjustment data in the memory.
10. Use the LINE1 for input and gray scale for signals, and set the 6500K mode via the menu on the screen.
11. Make adjustment exactly in the same way as 2 to 8 so that the color temperature will be 6500K + 8MPCD.
    C/O side: Within 2JND of 6500K + 8MPCD
    H/L side: Within 2JND of 6500K + 8MPCD
12. Save the adjustment data.

3-12. Subcontrast adjustment

1. Input a 100 IRE wind signal and set the 9300K mode via the menu on the screen. At that time, the user-controlled contrast and brightness should be in the reset status.
   Signals of about $\frac{H}{3} \bullet \frac{V}{3}$ free from ABL are acceptable.

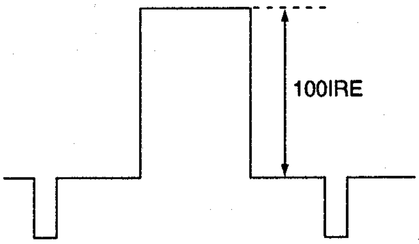


Fig.3-20

2. Move the picture in the VIDEO for computer BUS adjustment so that the brightness in the center of the CRT will be as shown below.
   Brightness: 170 ± 10 nit
3. Save the adjustment data.
4. Set the 6500K mode via the menu on the screen.
5. Move the picture in the VIDEO for computer BUS adjustment so that the brightness in the center of the CRT will be as shown below.
   Brightness: 170 ± 10 nit
6. Save the adjustment data.

3-13. Rough adjustment of screen size

1. Receive the cross hatch.
2. Turn the RV1801 on the A board so that the V-PIN correction will be maximum.
   V-PIN should become a barrel state.

Note : In case of the adjustment of RV1801 in step 3-13. is inappropriately, the V seam (horizontal seam of the screen center) will prezent so perform this adjustment carefully to disappear the V seam.

3. Service mode
   - H.SIZE
   - H.SHIFT
   - V.SIZE
   - V.CENTER
   - H.TRPZ
   - PIN-AMP

   Roughly adjust the above so that the screen size will be as shown below.

Setting values for rough setting of screen size

1) VGA Graphic and VGA Text mode screen size
   H: 519mm ± 3mm
   V: 389mm ± 3mm
2) Double-speed NTSC and double-speed PAL mode screen size
   H: 540mm ± 3mm
   V: 405mm ± 3mm
   (Same size as the effective CRT screen)

Note: The above specifications apply when the screen is viewed from the front. Respective screen sizes are measured from the center of the beam. Measurement is made near the X and Y axes of the CRT.

4. Save the adjustment data in the NVM.
5. With respect to VGA Text, double-speed NTSC, and double-speed PAL signals, roughly set the screen size according to the setting values shown above, and save the adjustment data in the NVM.

3-14. Raster center adjustment

1. Receive the all-white signal, and set the brightness in the MAX position and others in the standard status.

Note: Adjust the Purity Mg before the above adjustment.

2. Set the under scan for the H.SIZE in the service mode.
3. Adjust the H.CENT tap so that the H.SIZE of the right- and left-hand sides will be the same. Make adjustment so that the raster will be laterally balanced.

Note: Pay attention not to the image signal but to the lateral bias of the raster itself.

4. Return the H.SIZE in the service mode to the original data.

3-15. Confirmation of service command

1. Confirm that the service menu will be activated when the following is input via the commander.
   From the STANDBY state: DISPLAY + 5 + VOL+ + POWER
2. Turn OFF the POWER SW. Check that the service mode is cancelled when the power is turned ON again, or the service mode is turned on by the test command. (TEST + TV)

3-16. Shipment setting

According to the shipment setting, set the user control data in the shipment setting state. The SIRC command TEST+RESET may be used for setting.

Standard status/shipment setting status

Table.3-8 Usercontrol

Item	Status	OSD indication
VOLUME	33%	20
CONTRAST	80%	50
BRIGHTNESS	50%	00
COL TEMP	9300	9300
H CENT	50%	00
V CENT	50%	00
H SIZE	50%	00
V SIZE	50%	00
ROTATION	50%	00
SCAN SIZE	UNDER	UNDR
KEY STONE	50%	00
INDEX NO.	Arbitrary	001~255
REMOTE ONLY	OFF	OFF

Other
Item : Aging SW
Status : OFF

Mechanical SW
Item : POWER SW
Status : ON (Standard status) OFF (Shipment setting)

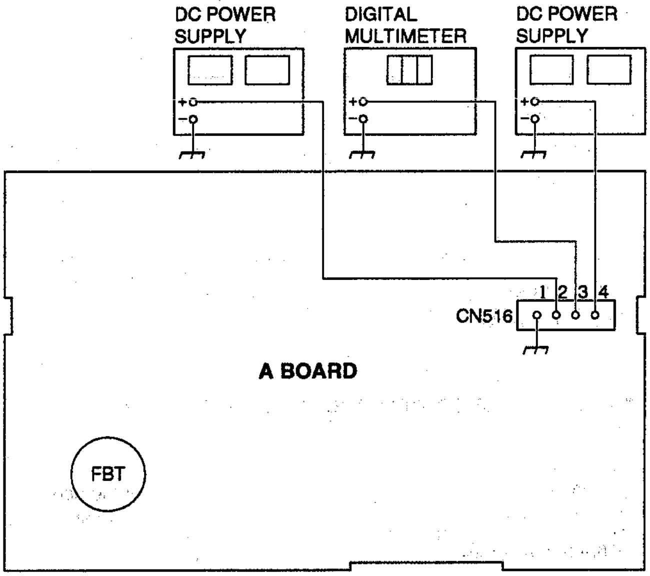
Item : AC VOLTAGE SELECT
Status : PGM-200R1U : 100~120 SIDE
PGM-200R1E : 220~240 SIDE
PGM-200R1A : 220~240 SIDE

SECTION 4
SAFTY RELATED ADJUSTMENT

CONFIRMATION OF HOLD-DOWN

Be sure to make the following adjustment after replacement of parts shown below (indicated with a ◪ mark in the circuit diagram):

◪ : R550, R551, R554, R555, R556, R558, R559, R560, R561, R562, R563, R564, R584, R585, R609, R684, R685, IC550, IC551, D560, D562, D563, C641, Q517, Q518



Hold-down operation voltage

1. Measuring conditions
   Turn on the power to input 130 V$^{+1.0}_{-0.0}$V/60 Hz.
   Use the VGA dot signal.
   CONTRAST MIN
   BRIGHTNESS MIN
2. Confirmation of HVR connection
   The voltage between the pin ③ of the CN516 on the A board and the GND should be 10.09V or more.
3. Confirmation of high-voltage protector
   When direct current of 12.39$^{+0.0}_{-0.1}$V is applied from outside to the section between the pin ② of the CN516 on the A board and the GND, the raster should disappear.
4. Confirmation of high-voltage current protector
   When direct current of -24.29$^{+0.2}_{-0.0}$V is applied from outside to the section between the pin ④ of the CN516 on the A board and the GND, the raster should disappear.

SECTION 5

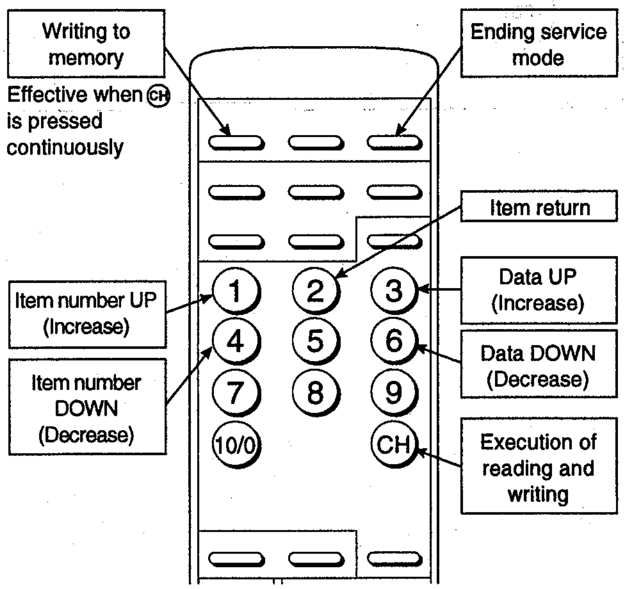
ELECTRIC ADJUSTMENT IN THE SERVICE MODE

Electric adjustment can be made with the remote commander RM-921 attached to the set. The adjusting items in the service mode are as follows:

RESET U MEN	All user control items are preset.
GEO DEST	Adjustment of screen distortion
D CONV	Convergence adjustment
W BALANCE	White balance adjustment

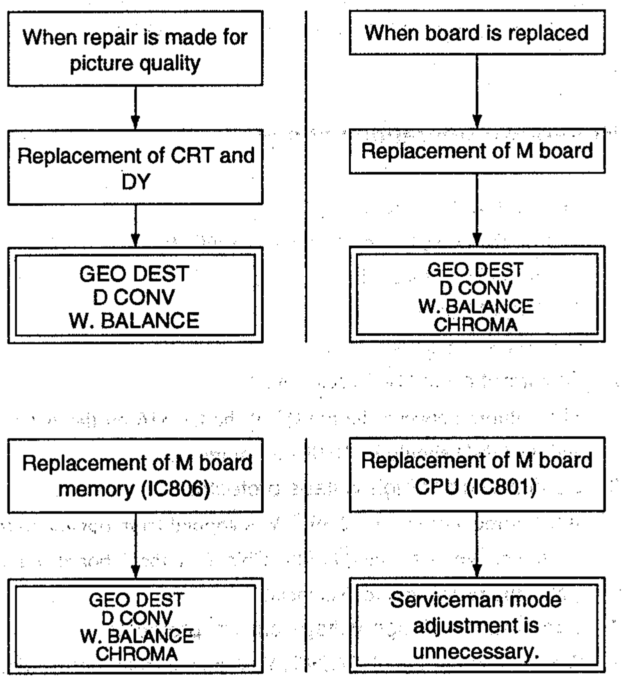
When entering the service mode, the set should be in the standby status. Press respective switches in order of DISPLAY→5→VOL +→POWER

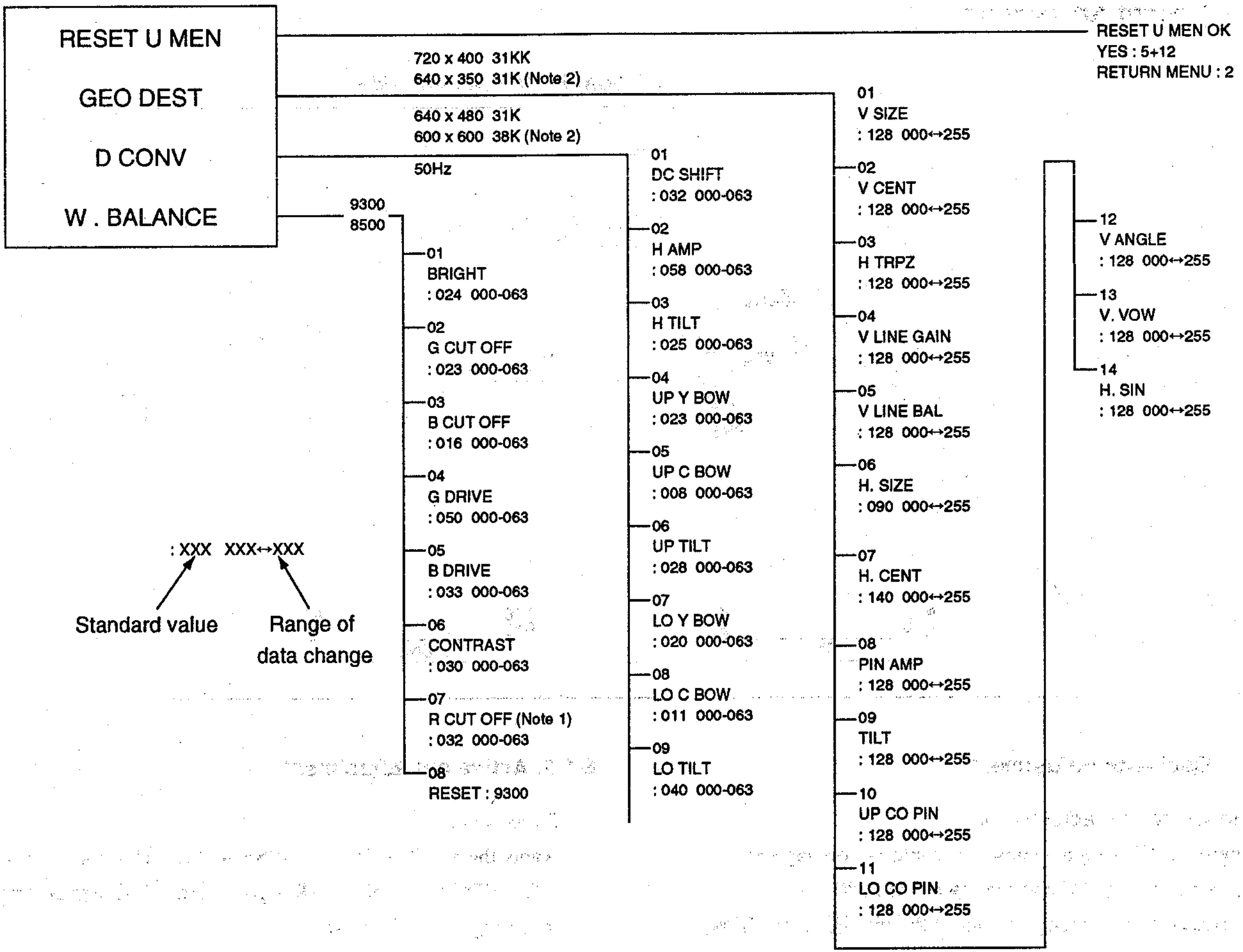
• Function of commander in service mode


Writing to memory
Effective when CH is pressed continuously
Ending service mode
Item return
Data UP (Increase)
Data DOWN (Decrease)
Item number UP (Increase)
Item number DOWN (Decrease)
Execution of reading and writing
1
2
3
4
5
6
7
8
9
10/0
CH

• When adjustment in the service mode is necessary

After the following repair, adjustment in the service mode is necessary.


When repair is made for picture quality
Replacement of CRT and DY
GEO DEST
D CONV
W. BALANCE
When board is replaced
Replacement of M board
GEO DEST
D CONV
W. BALANCE
CHROMA
Replacement of M board memory (IC806)
GEO DEST
D CONV
W. BALANCE
CHROMA
Replacement of M board CPU (IC801)
Serviceman mode adjustment is unnecessary.


RESET U MEN
GEO DEST
D CONV
W . BALANCE
RESET U MEN OK
YES : 5+12
RETURN MENU : 2
720 x 400 31KK
640 x 350 31K (Note 2)
640 x 480 31K
600 x 600 38K (Note 2)
50Hz
9300
8500
01 BRIGHT : 024 000-063
02 G CUT OFF : 023 000-063
03 B CUT OFF : 016 000-063
04 G DRIVE : 050 000-063
05 B DRIVE : 033 000-063
06 CONTRAST : 030 000-063
07 R CUT OFF (Note 1) : 032 000-063
08 RESET : 9300
01 DC SHIFT : 032 000-063
02 H AMP : 058 000-063
03 H TILT : 025 000-063
04 UP Y BOW : 023 000-063
05 UP C BOW : 008 000-063
06 UP TILT : 028 000-063
07 LO Y BOW : 020 000-063
08 LO C BOW : 011 000-063
09 LO TILT : 040 000-063
01 V SIZE : 128 000↔255
02 V CENT : 128 000↔255
03 H TRPZ : 128 000↔255
04 V LINE GAIN : 128 000↔255
05 V LINE BAL : 128 000↔255
06 H. SIZE : 090 000↔255
07 H. CENT : 140 000↔255
08 PIN AMP : 128 000↔255
09 TILT : 128 000↔255
10 UP CO PIN : 128 000↔255
11 LO CO PIN : 128 000↔255
12 V ANGLE : 128 000↔255
13 V. VOW : 128 000↔255
14 H. SIN : 128 000↔255
: XXX XXX↔XXX
Standard value
Range of data change

Note 1: Adjustment is unnecessary usually. Adjustment is necessary only when adjustment by respective G and B cutoffs is impossible due to nonuniform CRT characteristics. After adjustment, all white balances should be readjusted.

Note 2: The 640 x 350 and 800 x 600 modes do not support the PGM-200RIU/E/A/J, so adjustment is unnecessary. Only 640 x 350 and 800 x 600 correspond to the above mentioned.

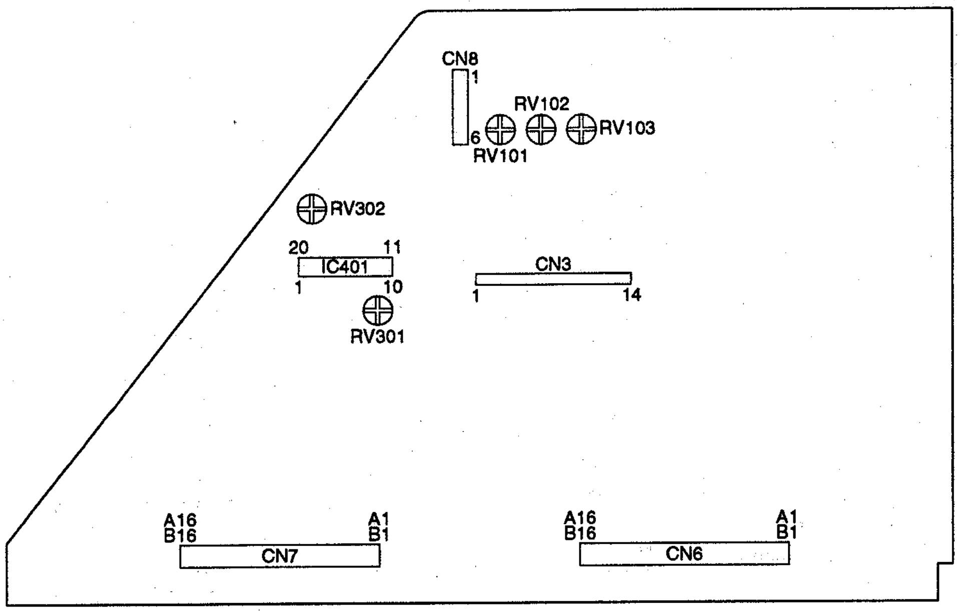
Caution

Example 1: The R CUT OFF should be adjusted only when the white balance cannot be adjusted due to nonuniform CRT characteristics, so adjustment is unnecessary usually. Since only one data memory is provided for all conditions, change in data causes change in the red black level of all signals and color temperatures (white balance on the black side).

SECTION 6
CIRCUIT ADJUSTMENTS 1 (PGM-200R1 SERIES)

6-1. UT board Adjustment

UT board –Component side–



6-1-1. Oscillator adjustment

1. Horizontal “fo” adjustment

1. Input the VGA signal shown in Table 3-1 on page 35.
2. Connect the pin ① and pin ⑭ of the IC401.
3. Connect the frequency counter to the pin ④ of the IC401.
4. Make adjustment by means of the RV301 so that the frequency counter reading will be within the following standard:
   Horizontal “fo” standard
   31.47kHz ± 100Hz
5. Disconnect 2 and 3.

2. Vertical oscillator adjustment

1. Receive the VGA signal shown in Table 3-1 on page 35.
   Check that the V.SYNC is applied to the pin ⑲ of the IC401.
2. Connect the oscilloscope between the pin ⑱ of the IC401 and the GND.
3. Make adjustment by means of the RV302 so that the waveform from the pin ⑱ of the IC401 will be within the following standard.

Vertical oscillator adjustment : Vp = 7.5 ± 0.1 V

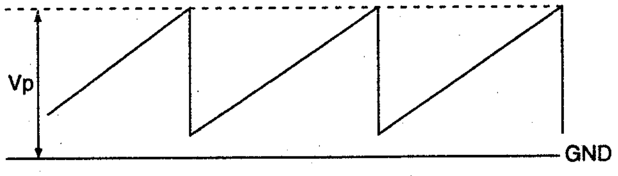


Fig.6-1

6-1-2. Active out adjustment

1. Preparation
   Apply the STBY + 5V to the CN6 A14 and B14. Apply a signal at 2.5 VDC to the pin ① (R signal), pin ③ (G signal), and pin ⑤ (B signal) of the CN8.
   * Signal level = 0.714 Vp-p (ON-SYNC)
2. Adjustment of active through out signal
   1) Input the gray scale signal of the VGA480.
      For further, when adjust the level, perform with 75Ω terminal end certainly.
   2) Check the pin ① (R OUT) of the CN3 with an oscilloscope, and adjust the level by means of the RV101 so that the signal level will be as shown in Fig.6-2.
   3) Check the pin ③ (G OUT) of the CN3 with an oscilloscope, and adjust the level by means of the RV102 so that the signal level will be as shown in Fig.6-2.
   4) Check the pin ⑤ (B OUT) of the CN3 with an oscilloscope, and adjust the level by means of the RV103 so that the signal level will be as shown in Fig.6-2.

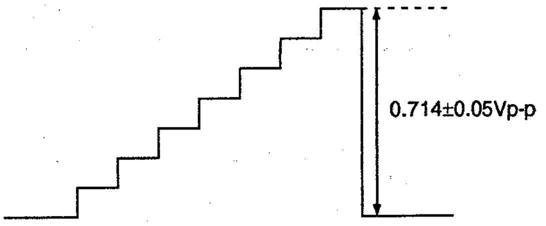


Fig.6-2 R. G. B. OUT signals (Gray scale)

SECTION 7
CIECUIT ADJUSTMENTS 2 (BKM-201SC)

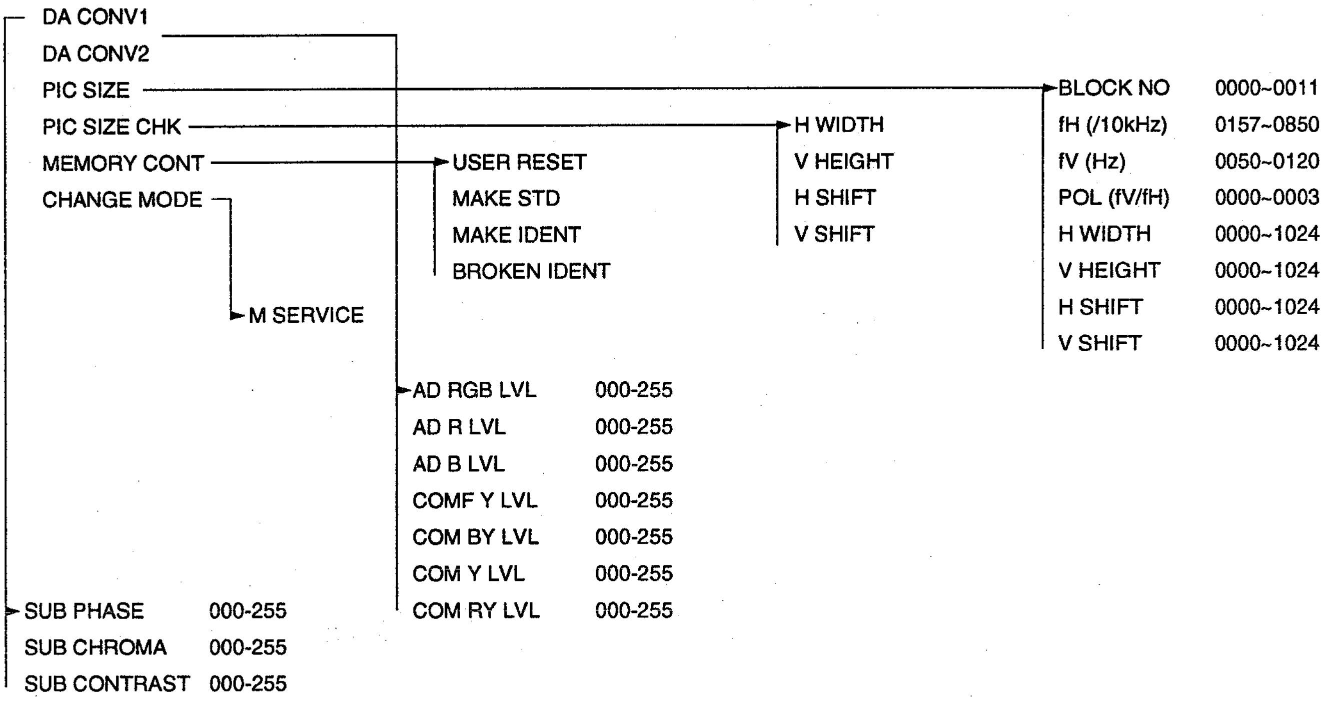
7-1. Preparation for adjustment

1. Input of Factory Preset Data

With regard to 12 signals, write the respective data on the H WIDTH, V HEIGHT, H SHIFT, V SHIFT, H FREQ, V FREQ, and POL, shown in Table 7-1, in the predetermined addresses of the the EEPROM of the BKM-201SC by means of a computer.

1. When entering the Service mode, press respective switches in order of $\boxed{\text{DISPLAY}} \rightarrow \boxed{5} \rightarrow \boxed{\text{VOL+}} \rightarrow \boxed{\text{POWER}}$.
   MAIN MENU
   ► DA CONV1
   DA CONV2
   PIC SIZE　　　For ► up and down are $\boxed{1}$ and $\boxed{4}$ keys.
   PIC SIZE CHK　For data up and down are $\boxed{3}$ and $\boxed{6}$ keys.
   MEMORY CONT
   CHANGE MODE
2. Select the MEMORY CONT with using CH key and when the USER RESET had become COMPLETED from WAIT, the perform has completed.
3. Select PIC SIZE to input the Factory Preset Data to BLOCK NO.0000~0011.
   Input BLOCK NO, H freg, POL, H width, V height, H shift, and V shift data.

Constitute a MENU


DA CONV1
DA CONV2
PIC SIZE
PIC SIZE CHK
MEMORY CONT
CHANGE MODE
M SERVICE
USER RESET
MAKE STD
MAKE IDENT
BROKEN IDENT
H WIDTH
V HEIGHT
H SHIFT
V SHIFT
BLOCK NO 0000~0011
fH (/10kHz) 0157~0850
fV (Hz) 0050~0120
POL (fV/fH) 0000~0003
H WIDTH 0000~1024
V HEIGHT 0000~1024
H SHIFT 0000~1024
V SHIFT 0000~1024
AD RGB LVL 000-255
AD R LVL 000-255
AD B LVL 000-255
COMF Y LVL 000-255
COM BY LVL 000-255
COM Y LVL 000-255
COM RY LVL 000-255
SUB PHASE 000-255
SUB CHROMA 000-255
SUB CONTRAST 000-255

2. Input of INDEX-NO

Table 7-1 Factory preset data

BLOCK NO	Signal	H width	V height	H shift	V shift	H freg	V freg	POL
0	NTSC	0458	0520	0527	0499	0157	0060	0003
1	PAL	0488	0520	0520	0507	0156	0050	0003
2	VGA (G)	0502	0534	0503	0504	0315	0060	0003
3	VGA (T)	0496	0568	0502	0507	0315	0070	0001
4	HDTV	0404	0000	0550	0510	0338	0060	0003
5	Mac 13"	0602	0518	0533	0515	0350	0067	0003
6	VESA 800 X 600	0570	0466	0502	0502	0379	0060	0000
7	VESA 1024 X 768	0564	0469	0482	0505	0484	0060	0003
8	Mac 16"	0624	0484	0468	0510	0497	0075	0003
9	ATI 1280 X 1024	0594	0450	0514	0501	0640	0060	0003
10	Mac 21"	0522	0460	0517	0502	0687	0075	0003
11	VESA 1280 X 1024	0554	0450	0492	0501	0800	0075	0000

Table 7-2 BKM-201SC Preset timing

MODE	1		2		3		4		5		6		7		8		9		10		11		12	
NAME	NTSC		PAL		HDTV		VGA		VGA (TEXT)		MAC13"		MAC16"		VESA800X600		VESA1024X768		ATI1280X1024		MAC21"		ATI1280X1024	
RESOLUTION	753 X 483		923 X 573		960 X 1034		640 X 480		720 X 400		640 X 480		832 X 624		800 X 600		1024 X 768		1280 X 1024		1152 X 870		1280 X 1024	
CLOCK	14.318MHz		17.750MHz		37.125MHz		25.175MHz		28.332MHz		30.240MHz		57.285MHz		40.000MHz		65.000MHz		110.000MHz		100.00MHz		135.00MHz	
HORIZONTAL																								
H. FREQ	15.734kHz		15.625kHz		33.750kHz		31.469kHz		31.469kHz		35.000kHz		49.727kHz		37.879kHz		48.363kHz		63.953kHz		68.681kHz		79.976kHz	
	μ sec	dots	μ sec	dots	μ sec	dots	μ sec	dots	μ sec	dots	μ sec	dots	μ sec	dots	μ sec	dots	μ sec	dots	μ sec	dots	μ sec	dots	μ sec	dots
H. TOTAL	63.556	910	64	1136	29.63	1100	31.778	800	31.766	900	28.571	864	20.110	1152	26.400	1056	20.677	1344	15.640	1720	14.560	1456	12.504	1688
H. BLK	10.900	156	12.000	213	3.771	140	6.356	160	6.353	180	7.407	224	5.586	320	6.400	256	4.923	320	4.000	440	3.040	304	3.022	408
H. FP	1.500	22	1.500	26	0.593	22	0.636	16	0.635	18	2.116	64	0.559	32	1.000	40	0.369	24	0.727	80	0.320	32	0.119	16
H. SYNC	4.700	67	4.700	84	0.593	22	3.813	96	3.812	108	2.116	64	1.117	64	3.200	128	2.092	136	1.018	112	1.280	128	1.067	144
H. BP	4.700	67	5.800	103	2.586	96	1.907	48	1.906	54	3.175	96	3.910	224	2.200	88	2.462	160	2.255	248	1.440	144	1.837	248
H. ACTIVE	52.656	754	52.000	923	25.859	960	25.422	640	25.413	720	21.164	640	14.524	832	20.000	800	15.754	1024	11.64	1280	11.520	1152	9.418	1280
VERTICAL																								
V.FREQ	59.940Hz		50.000Hz		59.940Hz		59.940Hz		70.111Hz		66.667Hz		74.553Hz		60.317Hz		60.004Hz		59.94Hz		75.061		75.025	
	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines	msec	lines				
V. TOTAL	16.683	262.5	20.000	312.5	16.667	562.5	16.683	525	14.263	449	15.000	525	13.413	667	16.579	628	16.666	806	16.688	1067	13.323	915	13.329	1066
V. BLK	1.303	20.5	1.632	25.5	1.348	45.5	1.43	45	1.557	49	1.286	45	0.865	43	0.739	28	0.786	38	0.673	43	0.655	45	0.525	42
V. FP	0.254	4	0.192	3	0.178	6	0.318	10	0.381	12	0.086	3	0.060	3	0.026	1	0.062	3	0.016	1	0.044	3	0.013	1
V. SYNC	0.191	3	0.160	2.5	0.148	5	0.064	2	0.064	2	0.086	3	0.060	3	0.106	4	0.124	6	0.078	5	0.044	3	0.038	3
V. BP	0.858	13.5	1.280	20	1.022	34.5	1.049	33	1.112	35	1.114	39	0.744	37	0.607	23	0.600	29	0.579	37	0.568	39	0.475	38
V. ACTIVE	15.381	242	18.368	287	15.319	517	15.253	480	12.706	400	13.714	480	12.549	624	15.84	600	15.880	768	16.015	1024	12.67	870	12.80	1024
SYNC																								
SOG					YES						YES													
EXT (H/V)							(-/-)		(-/+)		(-/-)		(-/-)		(+/+)		(-/-)		(-/-)		(-/-)		(+/+)	
EXT (COMP)																								
COMP VIDEO	YES		YES																					
VIDEO LEVEL	0.714V		0.700V		0.714V		0.714V		0.714V		0.714V		0.714V		0.714V		0.714V		0.714V		0.714V		0.714V	
SYNC LEVEL	0.286V		0.300V		0.286V		TTL		TTL		0.286V		TTL		TTL		TTL		TTL		TTL		TTL	

7-2. Adjustment of respective signal levels

1. RGB level adjustment

1. Make preparation for adjustment, input AC, input the gray scale of the VGA graphic (640 x 480) to RGB1, and select RGB1 via a Remote commander.
2. Observe the TP716 (G OUT) with an oscilloscope, and adjust the AD RGB level with a Remote commander so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-1)
3. Observe the TP715 (R OUT) with an oscilloscope, and adjust the AD R level with a Remote commander so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-1)
4. Observe the TP717 (B OUT) with an oscilloscope, and adjust the AD B level with a Remote commander so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-1)
5. Input the gray scale (incl. 100IRE) of the VGA Graphic (640 x 480) to the RGB2, and select the RGB2 with a Remote comander.
6. Observe the TP716 (G OUT) with an oscilloscope, and adjust the AD RGB level with a Remote commander so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-1)
7. Observe the TP715 (R OUT) with an oscilloscope, and adjust the AD R level with a Remote commander so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-1)
8. Observe the TP717 (B OUT) with an oscilloscope, and adjust the AD B level with a Remote commander so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-1)

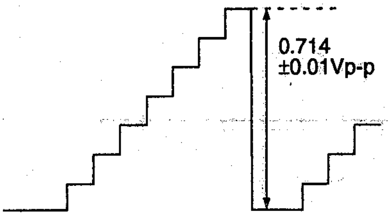


Fig.7-1

2. YUV level adjustment

1. Input the YUV signal to the RGB1 Input terminal. The signal should be 75% color and the white level should be 100% (NTSC).
2. Select the YUV mode via a Remote commander to enter the adjustment mode.
3. Select the AD RGB level of the DA CONV2, and input a value obtained by subtracting 32 from the value adjusted by the RGB1.
4. Observe the TP716 (G OUT) with an oscilloscope, and adjust the COM Y level in the DA CONV2 so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-2)

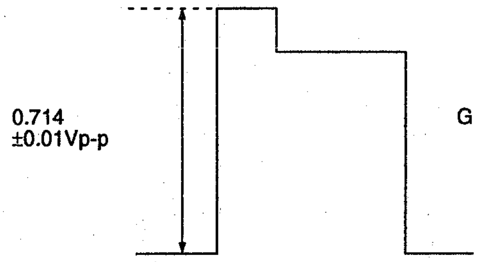


Fig.7-2

5. Observe the TP715 (R OUT) with an oscilloscope, and adjust the AD R level in the DA CONV2 so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-3)

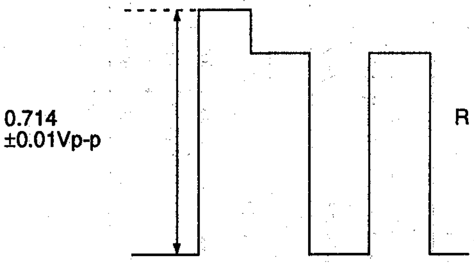


Fig.7-3

6. Observe the TP717 (B OUT) with an oscilloscope, and adjust the AD B level in the DA CONV2 so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-4)

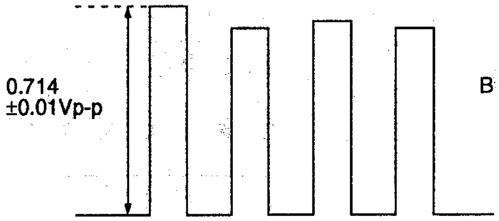


Fig.7-4

7. Change the white level to 75%.

8. Adjust the COM B-Y in the DA CONV2 so that the TP717 (B OUT) level and the B level will be the same. (Fig.7-5)

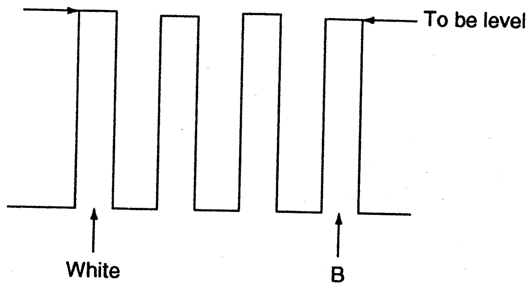


Fig.7-5

9. Adjust the COM R-Y in the DA CONV2 so that the TP715 (R OUT) level and the R level will be the same. (Fig.7-6)

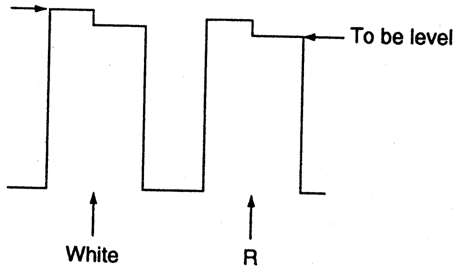


Fig.7-6

10. Ensure tracking between 8 and 9.
11. Adjust the SUB PHASE in the DA CONV1 so that all the output levels of the TP717 (B OUT) will be the same. (Fig.7-7)
Standard level difference: Within 0.01 V

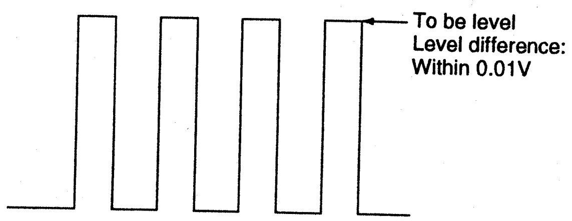


Fig.7-7

12. The levels are not the same, ensure tracking among 8, 9, and 11.
13. Change the signal to the YUV of the PAL, and make the same adjustment as the NTSC. However, the 100% white level to be output should be 0.7 ± 0.01 Vp-p.

Note: In the case of PAL, adjustment will be almost satisfactory when NTSC data are copied. So adjust only incorrect points after copying the data.

3. Y/C level adjustment

1. Input the 75% Y/C color bar of the NTSC to the Y/C input. White should be 100%.
2. Select the Y/C with a Remote commander to enter the adjustment mode, and input the same AD RGB level as the case of the YUV.
3. Observe the TP716 (G OUT) with an oscilloscope, and adjust the SUB CONT in the DA CONV1 so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-8)

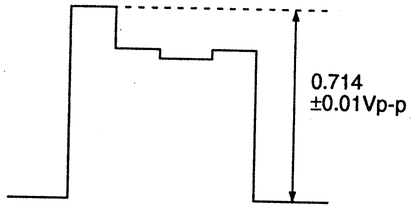


Fig.7-8

4. Observe the TP715 (R OUT) with an oscilloscope, and adjust the AD R level in the DA CONV2 so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-9)

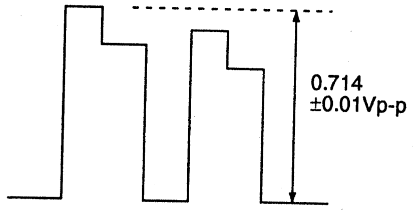


Fig.7-9

5. Observe the TP717 (B OUT) with an oscilloscope, and adjust the AD B level in the DA CONV2 so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-10)

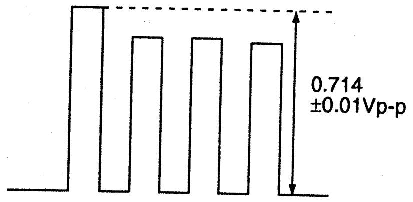


Fig.7-10

6. Change the white level to 75%, and adjust the SUB CROMA in the DA CONV1 so that the TP717 (B OUT) white level and the B level will be the same. (Fig.7-11)

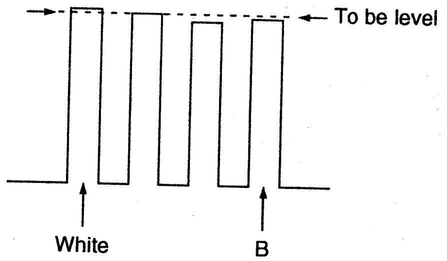


Fig.7-11

7. Adjust the SUB PHASE so that all output will be the same. (Fig.7-12)
Standard: Within 0.01 V

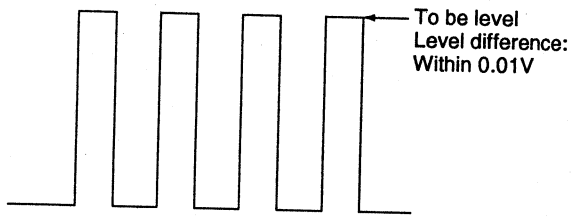


Fig.7-12

8. Ensure tracking between 6 and 7.
9. Change the signal to the PAL and make the same adjustment as the case of the NTSC. However, the signal level should be 0.70 ± 0.01 Vp-p.

Note: In the case of the PAL, copy the NTSC data and then adjust incorrect points.

4. Adjustment of composite video level

1. Input 75% color bar composite video of the NTSC to the line input, and enter the LINE input mode with a Remote commander. White should be 100%.
2. Enter the adjustment mode with a Remote commander, and input the value obtained by subtracting 25 from the AD RGB level that was adjusted by the RGB1. Input the SUB CONT value that was adjusted by the Y/C input to the SUB CONT.
3. Observe the TP716 (G OUT) with an oscilloscope, and adjust the COMF Y level in the DA CONV2 so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-13)

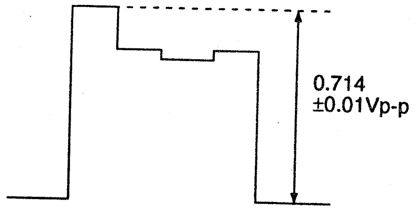


Fig.7-13

4. Observe the TP715 (R OUT) with an oscilloscope, and adjust the AD R level in the DA CONV2 so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-14)

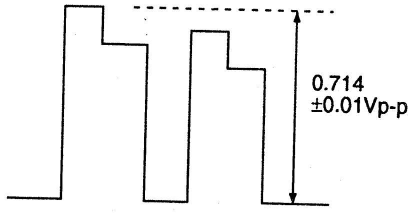


Fig.7-14

5. Observe the TP717 (B OUT) with an oscilloscope, and adjust the AD B level in the DA CONV2 so that the output level will be 0.714 V ± 0.01 Vp-p. (Fig.7-15)

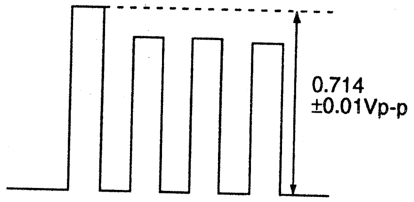


Fig.7-15

6. Change the white level to 75%, and adjust the SUB CROMA in the DA CONV1 so that the TP717 (B OUT) white level and the B level will be the same. (Fig.7-16)

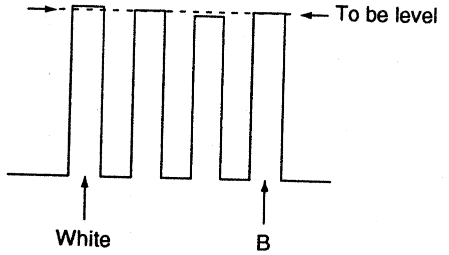


Fig.7-16

7.

8.
9.

Not

pe, and adjust
e output level

'p-p

ɔe, and adjust
ıt level will be

'p-p

ıe, and adjust
t level will be

'p-p

ɜ CROMA in
level and the

evel

7. Adjust the SUB PHASE so that all outputs will be the same. (Fig.7-17)
   Standard: Within 0.01 V

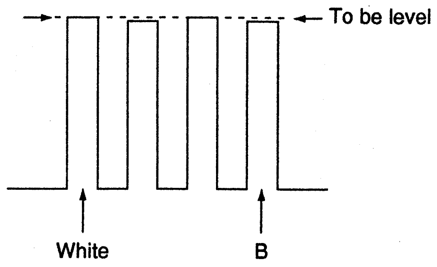


Fig.7-17

8. Ensure tracking between 6 and 7.
9. Change the signal to the PAL and make the same adjustment as the case of the NTSC. However, the signal level should be 0.70 ± 0.01 Vp-p.

Note: In case of the PAL, adjustment will be almost satisfactory when NTSC data are copied. So adjust only incorrect points after copying the data.

Table 7-3

BKM-201SC Data requiring overall adjustment

		RGB1	RGB2	YUV NTSC	YUV PAL	COMPOSITE NTSC	COMPOSITE PAL	Y/C NTSC	Y/C PAL
DA1	AD RGB Level	○	○	○	○	○	○	○	○
	ADR Level	○	○	○	○	○	○	○	○
	ADB Level	○	○	○	○	○	○	○	○
	COMF Y Level	×	×	×	×	○	○	×	×
	COM Y Level	×	×	○	○	×	×	×	×
	COM R-Y Level	×	×	○	○	×	×	×	×
	COM B-Y Level	×	×	○	○	×	×	×	×
DA2	SUB CONTRAST	×	×	×	×	○	○	○	○
	SUB PHASE	×	×	○	○	○	○	○	○
	SUB CHROMA	×	×	×	×	○	○	○	○

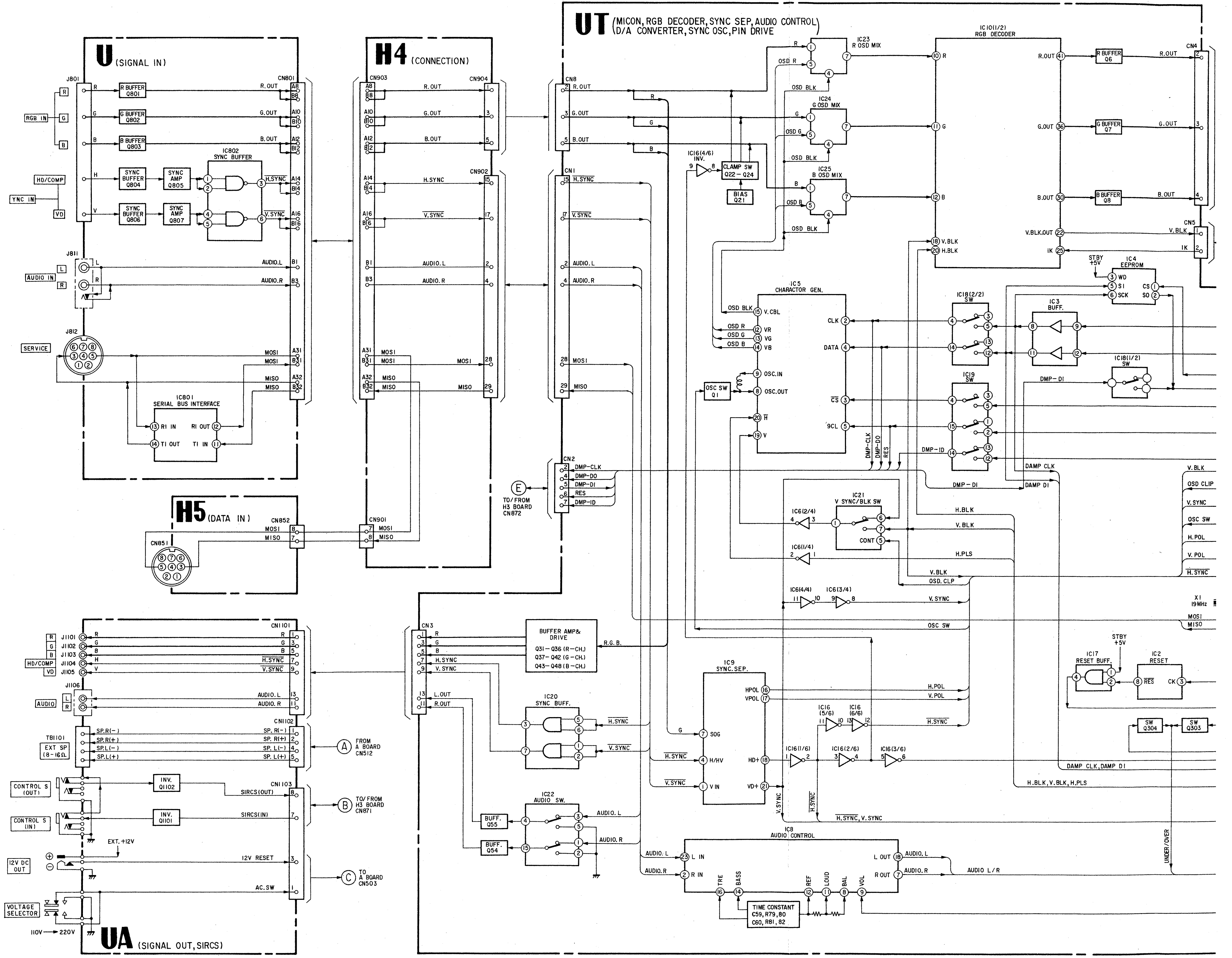
5. **At that time of the whole adjustments has completed, perform MAKE STD within the MEMORY CONT with using CH key. The perform has finished when the WAIT state become to COMPLETED.**

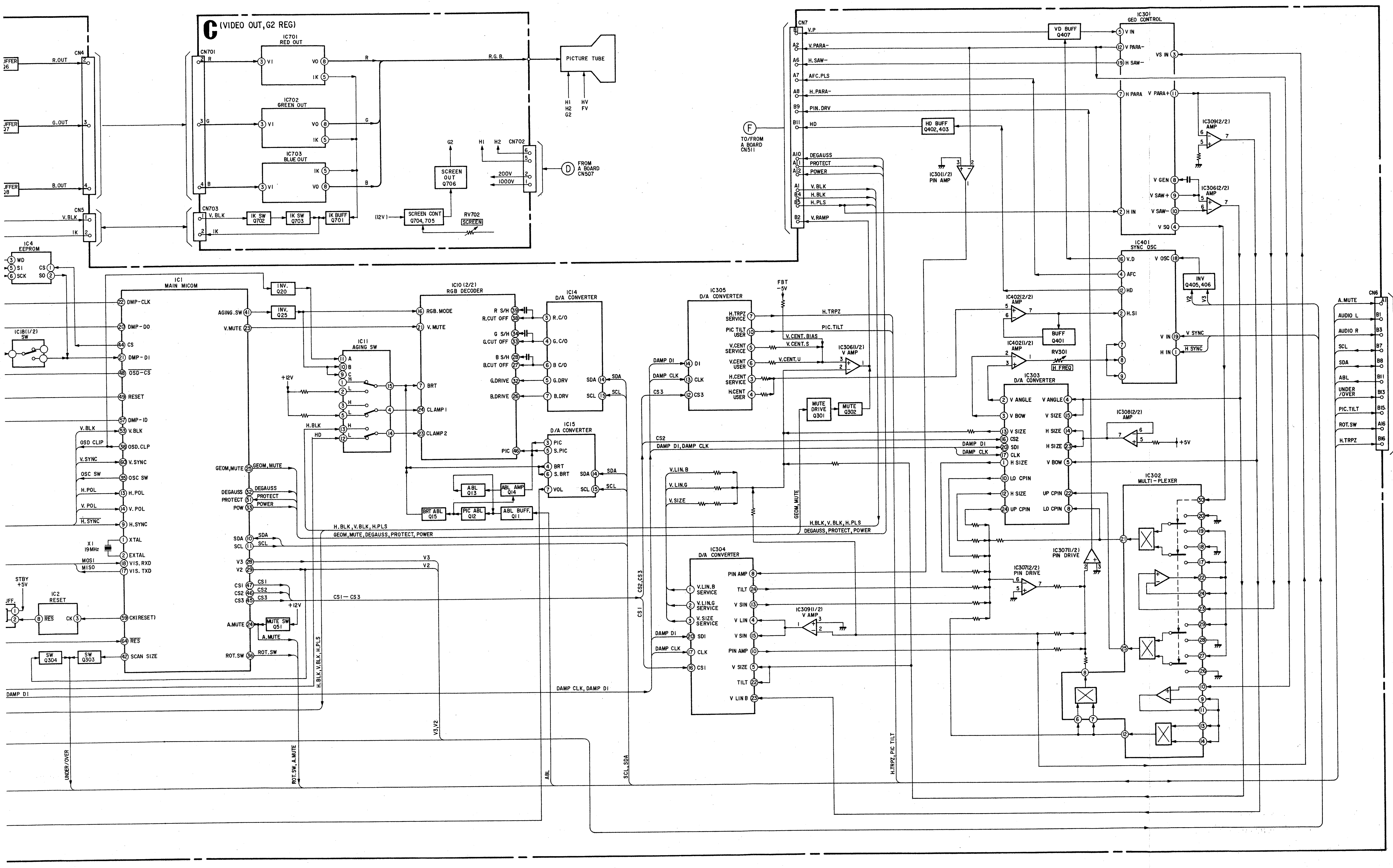
NOTE :
1. In case of exchanged only IC254 and IC255, adjustment is unnecessary and perform the MAKE STD with using CH key within MEMORY CONT of within the SERVICE MODE, the data will transmit to IC254 and IC255.
2. In case exchanged IC257, the whole adjustment is necessary and follow the whole adjustments like manual and in the end, perform MAKE STD and MAKE IDT within the MEMORY CONT with using CH key.

SECTION 8
DIAGRAMS

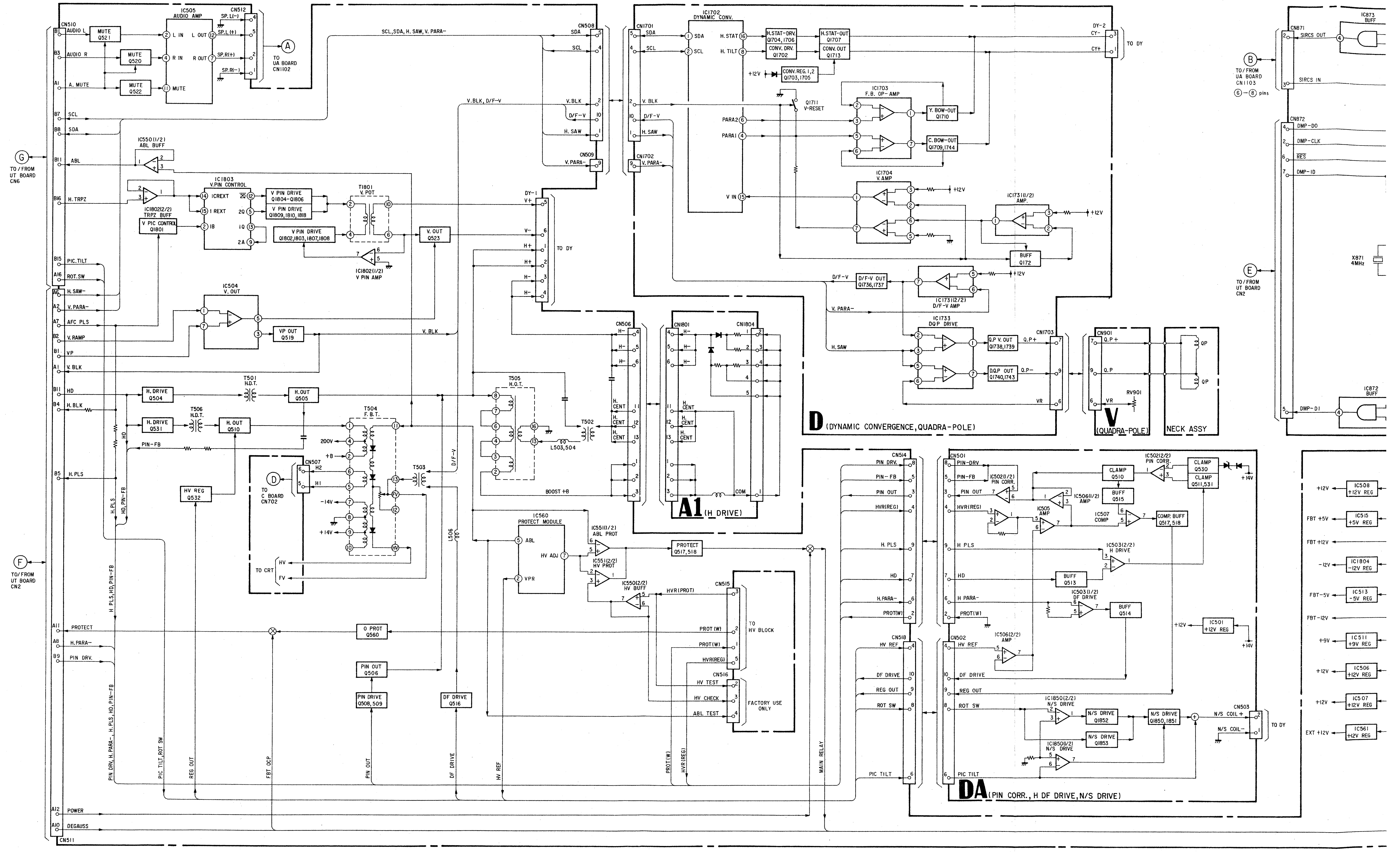
8-1. BLOCK DIAGRAMS

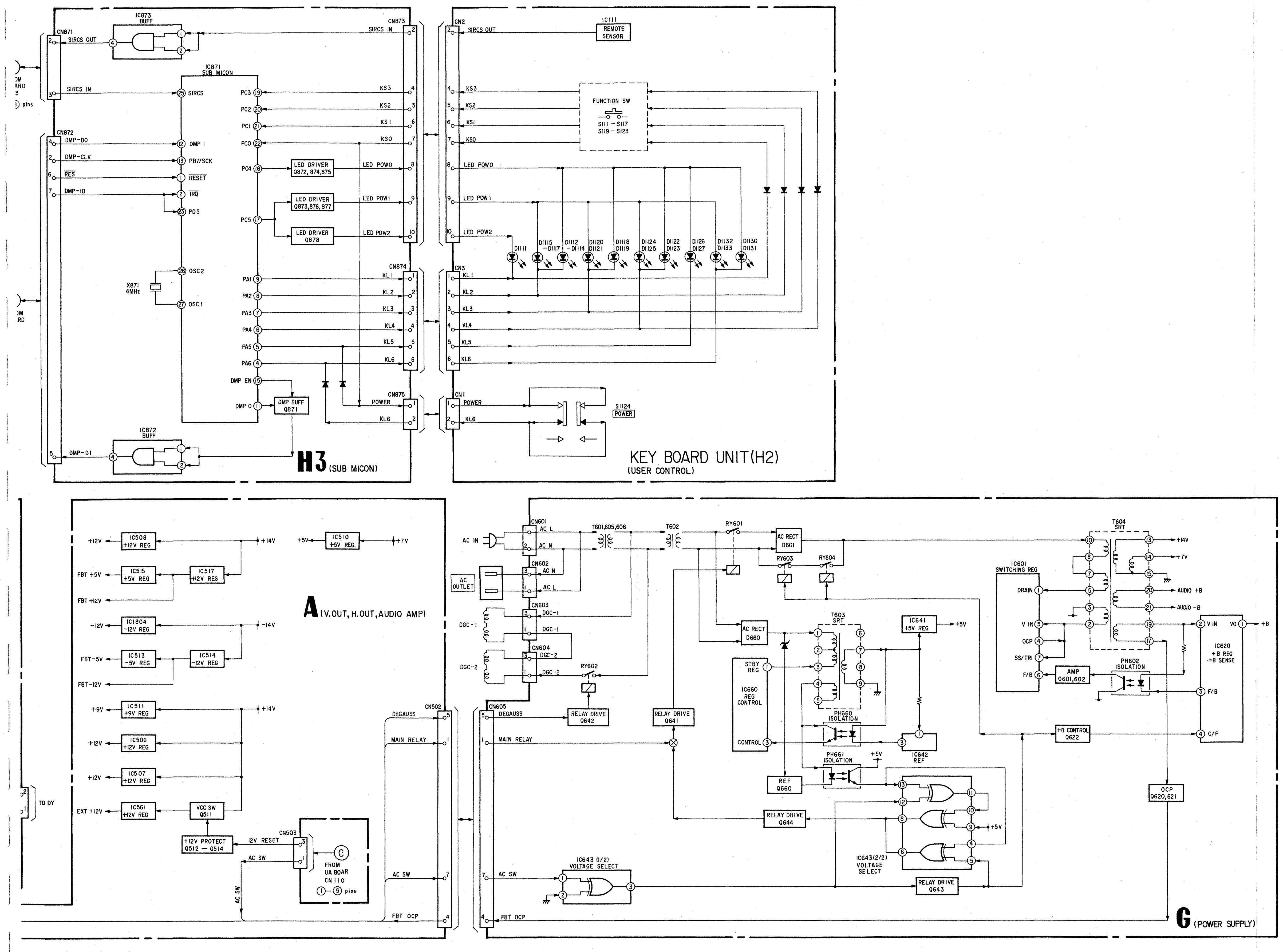
PGM-200R1U/200R1E/200R1A

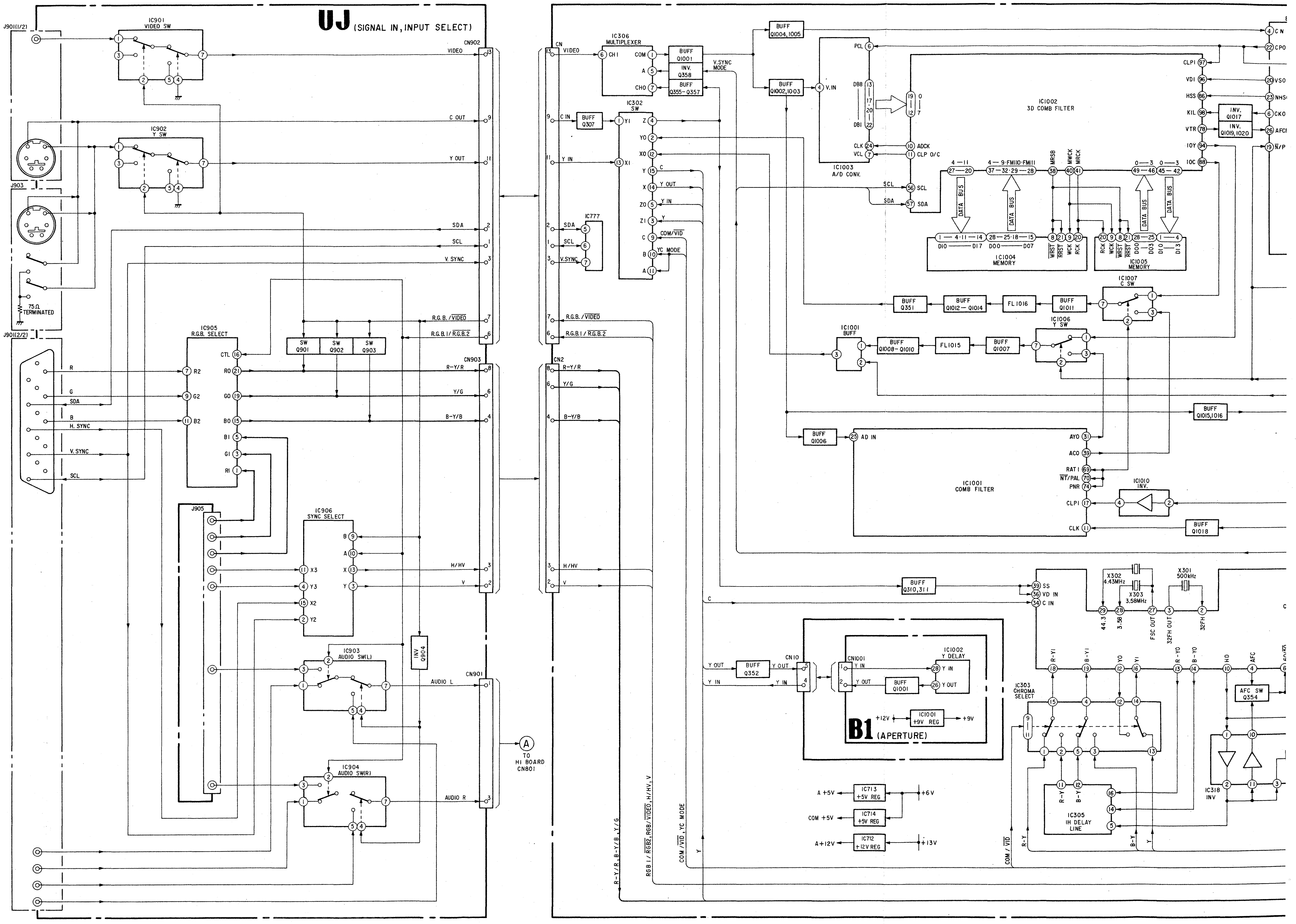

U (SIGNAL IN)
H4 (CONNECTION)
H5 (DATA IN)
UA (SIGNAL OUT, SIRCS)
UT (MICON, RGB DECODER, SYNC SEP, AUDIO CONTROL, D/A CONVERTER, SYNC OSC, PIN DRIVE)
RGB IN
HD/COMP
SYNC IN
VD
AUDIO IN
SERVICE
J801
J811
J812
R BUFFER Q801
G BUFFER Q802
B BUFFER Q803
SYNC BUFFER Q804
SYNC AMP Q805
SYNC BUFFER Q806
SYNC AMP Q807
IC802 SYNC BUFFER
IC801 SERIAL BUS INTERFACE
R1 IN
R1 OUT
T1 OUT
T1 IN
CN801
CN903
CN904
CN902
CN901
CN851
CN852
R.OUT
G.OUT
B.OUT
H.SYNC
V.SYNC
AUDIO.L
AUDIO.R
MOSI
MISO
CN1101
CN1102
CN1103
J1101
J1102
J1103
J1104
J1105
J1106
AUDIO
TB1101 EXT SP (8-16Ω)
SP.R(−)
SP.R(+)
SP.L(−)
SP.L(+)
CONTROL S (OUT)
CONTROL S (IN)
INV. Q1102
INV. Q1101
SIRCS(OUT)
SIRCS(IN)
EXT. +12V
12V DC OUT
12V RESET
AC.SW
VOLTAGE SELECTOR
110V
220V
A FROM A BOARD CN512
B TO/FROM H3 BOARD CN871
C TO A BOARD CN503
E TO/FROM H3 BOARD CN872
CN8
CN1
CN2
CN3
DMP-CLK
DMP-DO
DMP-DI
RES
DMP-ID
IC23 R OSD MIX
IC24 G OSD MIX
IC25 B OSD MIX
OSD R
OSD G
OSD B
OSD BLK
IC16(4/6) INV.
CLAMP SW Q22-Q24
BIAS Q21
IC10(1/2) RGB DECODER
R BUFFER Q6
G BUFFER Q7
B BUFFER Q8
V.BLK
H.BLK
V.BLK.OUT
IK
CN4
CN5
STBY +5V
IC4 EEPROM
WD
SI
SCK
CS
SO
IC5 CHARACTOR GEN.
V.CBL
VR
VG
VB
OSC.IN
OSC.OUT
H
V
CLK
DATA
CS
SCL
OSC SW Q1
IC18(2/2) SW
IC3 BUFF.
IC18(1/2) SW
IC19 SW
DMP-ID
DMP-DI
DAMP CLK
DAMP DI
IC21 V SYNC/BLK SW
CONT
IC6(2/4)
IC6(1/4)
IC6(4/4)
IC6(3/4)
H.PLS
OSD.CLP
OSC SW
V.BLK
OSD CLIP
V.SYNC
H.POL
V.POL
X1 19MHz
BUFFER AMP & DRIVE Q31-Q36 (R-CH) Q37-Q42 (G-CH) Q43-Q48 (B-CH)
R.G.B.
L.OUT
R.OUT
IC20 SYNC BUFF.
IC22 AUDIO SW.
BUFF. Q55
BUFF. Q54
IC9 SYNC. SEP.
SOG
H/HV
VIN
HPOL
VPOL
HD+
VD+
IC16 (5/6)
IC16 (6/6)
IC16(1/6)
IC16(2/6)
IC16(3/6)
H.SYNC, V.SYNC
IC8 AUDIO CONTROL
L IN
R IN
TRE
BASS
REF
LOUD
BAL
VOL
L OUT
R OUT
TIME CONSTANT C59, R79, 80 C60, R81, 82
AUDIO L/R
IC17 RESET BUFF.
IC2 RESET
RES
CK
SW Q304
SW Q303
DAMP CLK, DAMP DI
H.BLK, V.BLK, H.PLS
UNDER/OVER

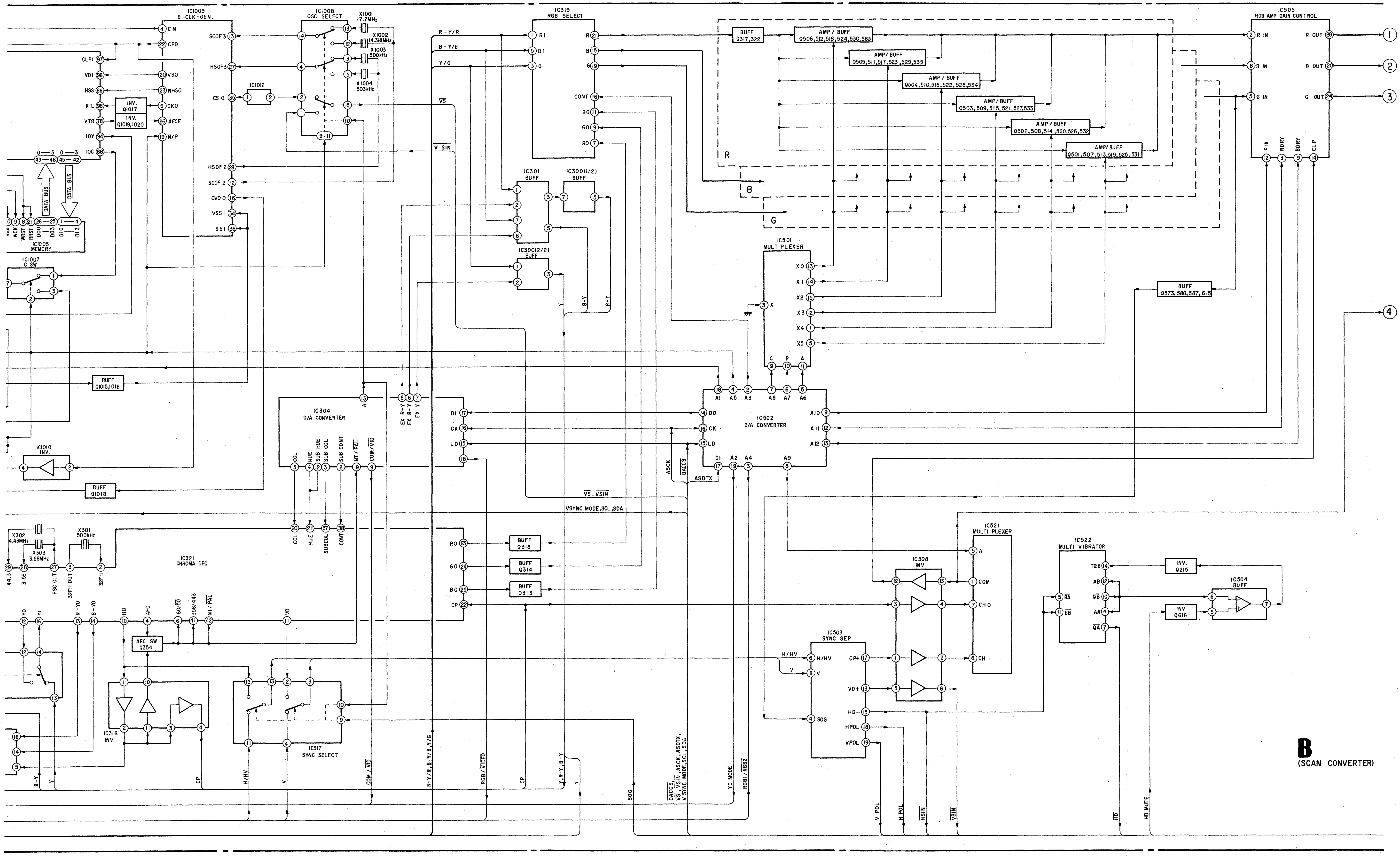


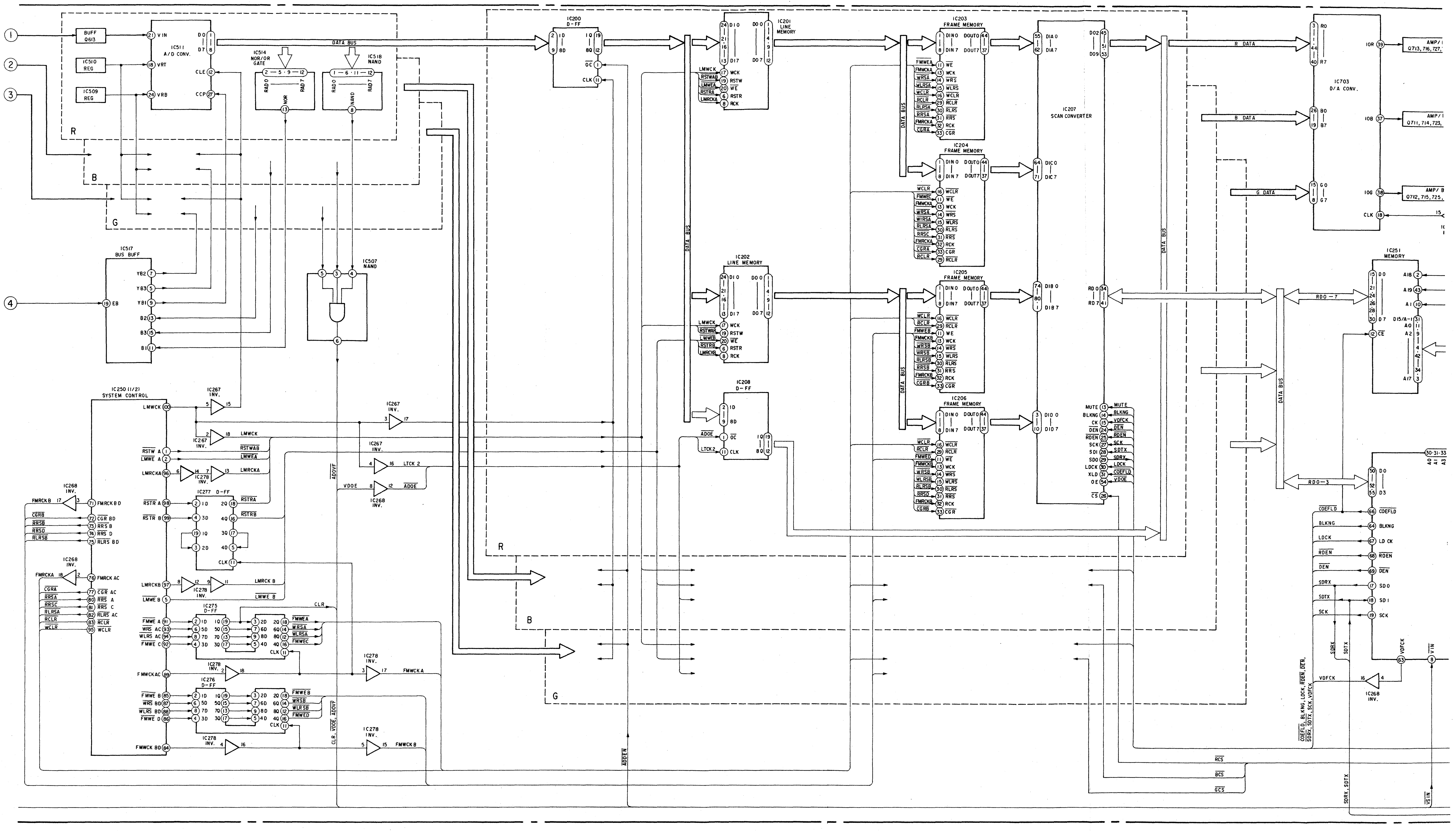
C (VIDEO OUT, G2 REG)
IC701 RED OUT
IC702 GREEN OUT
IC703 BLUE OUT
CN4
CN5
CN701
CN702
CN703
R.OUT
G.OUT
B.OUT
V.BLK
IK
R.G.B.
PICTURE TUBE
H1 H2 G2
HV FV
SCREEN OUT Q706
SCREEN CONT Q704, 705
RV702 SCREEN
IK SW Q702
IK SW Q703
IK BUFF Q701
200V
1000V
FROM A BOARD CN507
IC4 EEPROM
IC1 MAIN MICOM
IC2 RESET
IC18(1/2) SW
INV. Q20
INV. Q25
SW Q304
SW Q303
X1 19MHz
DMP-CLK
DMP-DO
CS
DMP-DI
OSD-CS
RESET
DMP-ID
V.BLK
OSD.CLP
V.SYNC
OSC SW
H.POL
V.POL
H.SYNC
XTAL
EXTAL
VIS.RXD
VIS.TXD
CK(RESET)
RES
SCAN SIZE
AGING.SW
V.MUTE
GEOM,MUTE
DEGAUSS
PROTECT
POWER
SDA
SCL
V3
V2
CS1
CS2
CS3
A.MUTE
MUTE SW Q51
ROT.SW
STBY +5V
IC10(2/2) RGB DECODER
IC11 AGING SW
IC14 D/A CONVERTER
IC15 D/A CONVERTER
RGB.MODE
BRT
CLAMP1
CLAMP2
R S/H
R.CUT OFF
G S/H
G.CUT OFF
B S/H
B.CUT OFF
G.DRIVE
B.DRIVE
R.C/O
G.C/O
B C/O
G.DRV
B.DRV
PIC
S.PIC
S.BRT
VOL
ABL Q13
ABL AMP Q14
BRT ABL Q15
PIC ABL Q12
ABL BUFF. Q11
H.BLK, V.BLK, H.PLS
GEOM, MUTE, DEGAUSS, PROTECT, POWER
DAMP CLK, DAMP DI
UNDER/OVER
ROT.SW, A.MUTE
ABL
SCL, SDA
V3, V2
CS1 — CS3
IC305 D/A CONVERTER
H.TRPZ SERVICE
PIC TILT USER
V.CENT SERVICE
V.CENT USER
H.CENT SERVICE
H.CENT USER
FBT -5V
V.CENT. BIAS
V.CENT. S
V.CENT. U
IC306(1/2) V AMP
MUTE DRIVE Q301
MUTE Q302
IC304 D/A CONVERTER
V.LIN.B SERVICE
V.LIN.G SERVICE
V.SIZE SERVICE
PIN AMP
TILT
V SIN
V LIN
V SIZE
V LIN B
IC309(1/2) V AMP
H.TRPZ, PIC TILT
CN7
V.P
V.PARA-
H.SAW-
AFC.PLS
H.PARA-
PIN.DRV
HD
DEGAUSS
PROTECT
POWER
V.BLK
H.BLK
H.PLS
V.RAMP
TO/FROM A BOARD CN511
VD BUFF Q407
HD BUFF Q402, 403
IC301(1/2) PIN AMP
IC301 GEO CONTROL
V IN
V PARA-
H SAW-
VS IN
H PARA
V PARA+
V GEN
V SAW+
V SAW-
V SQ
H IN
IC309(2/2) AMP
IC306(2/2) AMP
IC401 SYNC OSC
V.D
AFC
HD
H.SI
V OSC
INV Q405, 406
V SYNC
H SYNC
IC402(2/2) AMP
IC402(1/2) AMP
BUFF Q401
RV301 H FREQ
IC303 D/A CONVERTER
V ANGLE
V BOW
V SIZE
H SIZE
SDI
CLK
LO CPIN
UP CPIN
IC308(2/2) AMP
+5V
IC302 MULTI-PLEXER
IC307(1/2) PIN DRIVE
IC307(2/2) PIN DRIVE
CN6
A.MUTE
AUDIO L
AUDIO R
SCL
SDA
ABL
UNDER /OVER
PIC.TILT
ROT.SW
H.TRPZ
TO/FROM A BOARD CN510

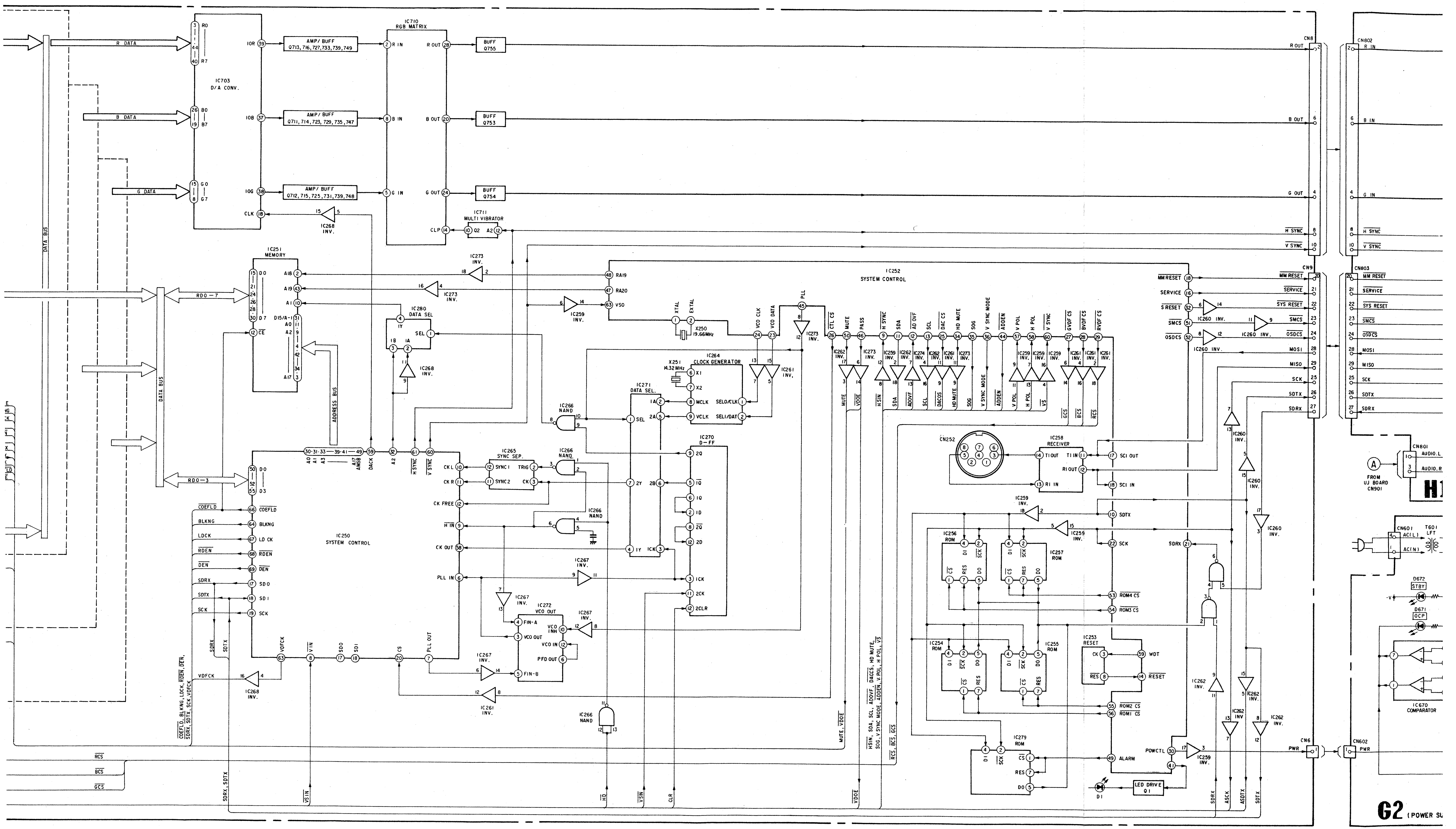

IC505 AUDIO AMP
MUTE Q521
MUTE Q520
MUTE Q522
TO UA BOARD CN1102
TO/FROM UT BOARD CN6
TO/FROM UT BOARD CN2
IC550(1/2) ABL BUFF
IC1803 V.PIN CONTROL
V PIN DRIVE Q1804-Q1806
V PIN DRIVE Q1809,1810,1818
V PIN DRIVE Q1802,1803,1807,1808
T1801 V.POT
V PIC CONTROL Q1801
IC1802(2/2) TRPZ BUFF
IC1802(1/2) V PIN AMP
V. OUT Q523
IC504 V. OUT
VP OUT Q519
H. DRIVE Q504
T501 H.D.T.
H.OUT Q505
H. DRIVE Q531
T506 H.D.T.
H. OUT Q510
T504 F.B.T.
T505 H.O.T.
T502
T503
L503,504
HV REG Q532
TO C BOARD CN702
TO CRT
IC560 PROTECT MODULE
IC551(1/2) ABL PROT
IC551(2/2) HV PROT
IC550(2/2) HV BUFF
PROTECT Q517,518
O PROT Q560
PIN OUT Q506
PIN DRIVE Q508,509
DF DRIVE Q516
TO HV BLOCK
FACTORY USE ONLY
IC1702 DYNAMIC CONV.
H.STAT-DRV. Q1704,1706
CONV. DRV. Q1702
H.STAT-OUT Q1707
CONV. OUT Q1713
CONV.REG.1,2 Q1703,1705
Q1711 V-RESET
IC1703 F.B. OP-AMP
Y. BOW-OUT Q1710
C. BOW-OUT Q1709,1744
IC1704 V. AMP
IC1731(1/2) AMP.
BUFF Q172
D/F-V OUT Q1736,1737
IC1731(2/2) D/F-V AMP
IC1733 DQP DRIVE
Q.P V. OUT Q1738,1739
DQP OUT Q1740,1743
TO DY
D (DYNAMIC CONVERGENCE,QUADRA-POLE)
V (QUADRA-POLE)
NECK ASSY
A1 (H DRIVE)
IC502(1/2) PIN CORR.
IC506(1/2) AMP
IC505 AMP
IC507 COMP
CLAMP Q510
BUFF Q515
IC502(2/2) PIN CORR.
CLAMP Q530
CLAMP Q511,531
COMP. BUFF Q517,518
IC503(2/2) H DRIVE
BUFF Q513
IC503(1/2) DF DRIVE
BUFF Q514
IC506(2/2) AMP
IC1850(2/2) N/S DRIVE
N/S DRIVE Q1852
N/S DRIVE Q1853
IC1850(1/2) N/S DRIVE
N/S DRIVE Q1850,1851
IC501 +12V REG
DA (PIN CORR., H DF DRIVE,N/S DRIVE)
IC873 BUFF
IC872 BUFF
X871 4MHz
TO/FROM UA BOARD CN1103 ⑥-⑧ pins
IC508 +12V REG
IC515 +5V REG
IC1804 -12V REG
IC513 -5V REG
IC511 +9V REG
IC506 +12V REG
IC507 +12V REG
IC561 +12V REG

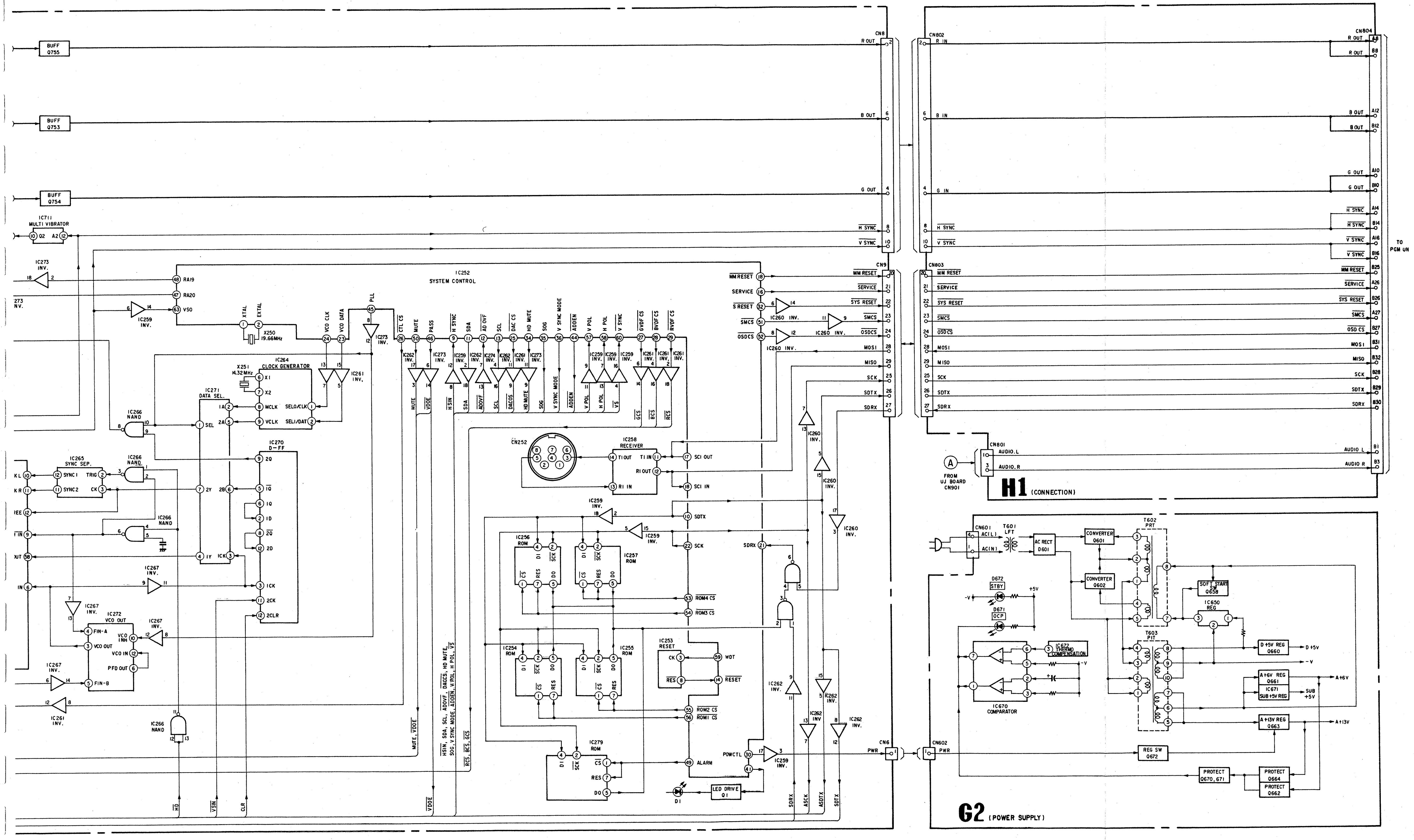

IC873 BUFF
CN871
SIRCS OUT
SIRCS IN
CN872
DMP-DO
DMP-CLK
RES
DMP-ID
DMP-DI
IC871 SUB MICON
SIRCS
DMP I
PB7/SCK
RESET
IRQ
PD5
OSC2
OSC1
X871 4MHz
PC3
PC2
PC1
PC0
PC4
PC5
PA1
PA2
PA3
PA4
PA5
PA6
DMP EN
DMP O
LED DRIVER Q872, 874, 875
LED DRIVER Q873, 876, 877
LED DRIVER Q878
DMP BUFF Q871
IC872 BUFF
CN873
CN874
CN875
KS3
KS2
KS1
KS0
LED POW0
LED POW1
LED POW2
KL1
KL2
KL3
KL4
KL5
KL6
POWER
H3 (SUB MICON)
CN2
CN3
CN1
IC111 REMOTE SENSOR
FUNCTION SW
S111 - S117
S119 - S123
D1111
D1115 -D1117
D1112 -D1114
D1120 D1121
D1118 D1119
D1124 D1125
D1122 D1123
D1126 D1127
D1132 D1133
D1130 D1131
S1124 POWER
KEY BOARD UNIT(H2)
(USER CONTROL)
IC508 +12V REG
IC510 +5V REG.
IC515 +5V REG
IC517 +12V REG
IC1804 -12V REG
IC513 -5V REG
IC514 -12V REG
IC511 +9V REG
IC506 +12V REG
IC507 +12V REG
IC561 +12V REG
VCC SW Q511
+12V PROTECT Q512 — Q514
12V RESET
AC SW
CN503
FROM UA BOAR CN110 ①-⑤ pins
CN502
DEGAUSS
MAIN RELAY
FBT OCP
TO DY
A (V.OUT, H.OUT, AUDIO AMP)
AC IN
AC OUTLET
DGC-1
DGC-2
CN601
AC L
AC N
CN602
CN603
CN604
CN605
T601, 605, 606
T602
RY601
RY602
RY603
RY604
AC RECT D601
AC RECT D660
STBY REG
IC660 REG CONTROL
CONTROL
T603 SRT
IC641 +5V REG
PH660 ISOLATION
PH661 ISOLATION
IC642 REF
REF Q660
RELAY DRIVE Q642
RELAY DRIVE Q641
RELAY DRIVE Q644
RELAY DRIVE Q643
IC643 (1/2) VOLTAGE SELECT
IC643 (2/2) VOLTAGE SELECT
IC601 SWITCHING REG
DRAIN
V IN
OCP
SS/TRI
F/B
AMP Q601, 602
PH602 ISOLATION
T604 SRT
+14V
+7V
AUDIO +B
AUDIO -B
IC620 +B REG +B SENSE
V IN
VO
+B
C/P
+B CONTROL Q622
OCP Q620, 621
G (POWER SUPPLY)

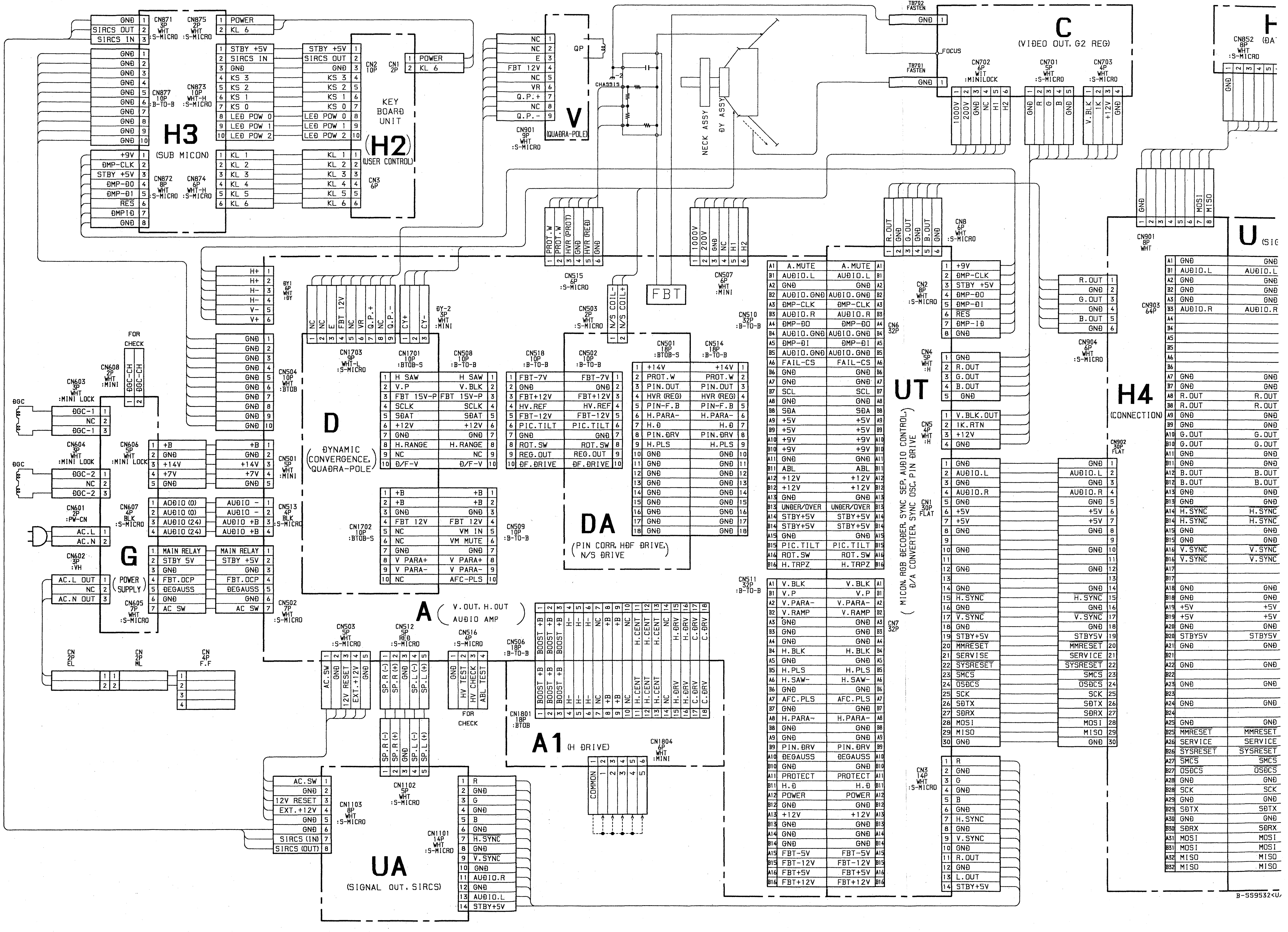

UJ (SIGNAL IN, INPUT SELECT)
J901(1/2)
J903
J901(2/2)
J905
75Ω TERMINATED
IC901 VIDEO SW
IC902 Y SW
IC905 R.G.B. SELECT
IC906 SYNC SELECT
IC903 AUDIO SW(L)
IC904 AUDIO SW(R)
SW Q901
SW Q902
SW Q903
INV Q904
CN902
CN903
CN901
VIDEO
C OUT
Y OUT
SDA
SCL
V. SYNC
H. SYNC
R.G.B. / VIDEO
R.G.B.1 / R.G.B.2
R-Y/R
Y/G
B-Y/B
H/HV
V
AUDIO L
AUDIO R
R
G
B
A
TO HI BOARD CN801
CN
CN2
IC306 MULTIPLEXER
IC302 SW
IC777
BUFF Q307
BUFF Q1001
INV. Q358
BUFF Q355-Q357
V.SYNC MODE
COM/VID
YC MODE
BUFF Q1004, 1005
BUFF Q1002, 1003
IC1003 A/D CONV.
IC1002 3D COMB FILTER
IC1004 MEMORY
IC1005 MEMORY
DATA BUS
ADCK
CLP O/C
INV. Q1017
INV. Q1019, 1020
IC1007 C SW
IC1006 Y SW
IC1001 BUFF
BUFF Q351
BUFF Q1012-Q1014
FL1016
BUFF Q1011
BUFF Q1008-Q1010
FL1015
BUFF Q1007
BUFF Q1015, 1016
BUFF Q1006
AD IN
IC1001 COMB FILTER
IC1010 INV.
BUFF Q1018
BUFF Q310, 311
X302 4.43MHz
X303 3.58MHz
X301 500kHz
FSC OUT
32FH OUT
32FH
SS
VD IN
C IN
Y OUT
Y IN
BUFF Q352
CN10
CN1001
IC1002 Y DELAY
BUFF Q1001
IC1001 +9V REG
+12V
+9V
B1 (APERTURE)
IC303 CHROMA SELECT
IC305 1H DELAY LINE
IC318 INV
AFC SW Q354
HD
AFC
IC713 +5V REG
IC714 +5V REG
IC712 +12V REG
A +5V
COM +5V
A+12V
+6V
+13V
R-Y/R, B-Y/B, Y/G
RGB 1/ RGB2, RGB/VIDEO, H/HV, V
COM/VID, YC MODE
Y
C

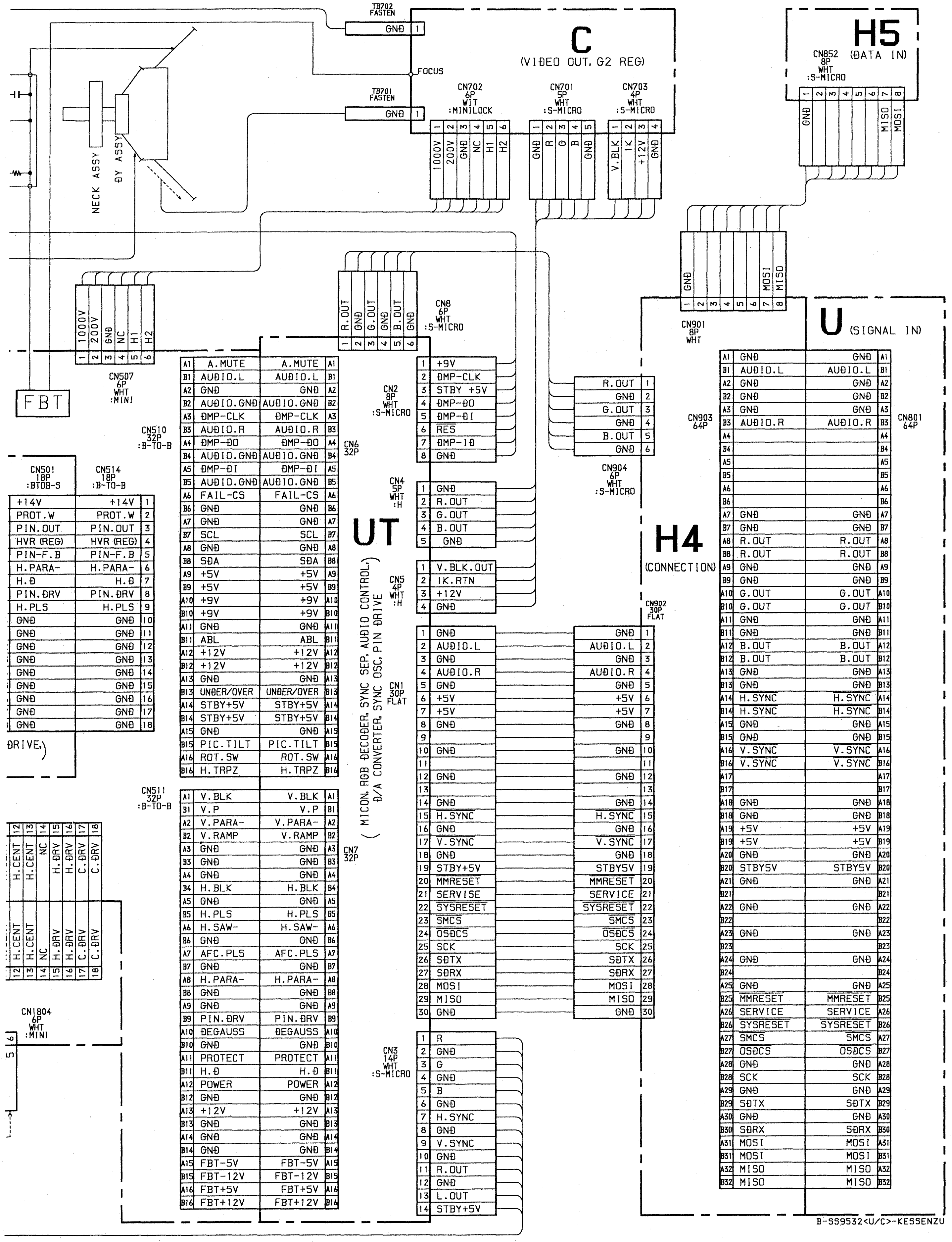

B
(SCAN CONVERTER)
IC1009 B-CLK-GEN.
IC1008 OSC SELECT
X1001 17.7MHz
X1002 14.318MHz
X1003 500kHz
X1004 503kHz
IC1012
IC319 RGB SELECT
IC301 BUFF
IC300(1/2) BUFF
IC300(2/2) BUFF
IC505 RGB AMP GAIN CONTROL
BUFF Q317,322
AMP/BUFF Q506,512,518,524,530,563
AMP/BUFF Q505,511,517,523,529,535
AMP/BUFF Q504,510,516,522,528,534
AMP/BUFF Q503,509,515,521,527,533
AMP/BUFF Q502,508,514,520,526,532
AMP/BUFF Q501,507,513,519,525,531
BUFF Q573,580,587,615
IC501 MULTIPLEXER
IC502 D/A CONVERTER
IC304 D/A CONVERTER
IC1005 MEMORY
IC1007 C SW
INV. Q1017
INV. Q1019,1020
BUFF Q1015,1016
IC1010 INV.
BUFF Q1018
X302 4.43MHz
X303 3.58MHz
X301 500kHz
IC321 CHROMA DEC.
AFC SW Q354
IC318 INV
IC317 SYNC SELECT
BUFF Q318
BUFF Q314
BUFF Q313
IC503 SYNC SEP
IC508 INV
IC521 MULTI PLEXER
IC522 MULTI VIBRATOR
INV. Q215
INV Q616
IC504 BUFF
R-Y/R
B-Y/B
Y/G
VS
V SIN
VS, VSIN
VSYNC MODE,SCL,SDA
ASDTX
ASCK
DACCS
DATA BUS
R
B
G
①
②
③
④
R OUT
B OUT
G OUT
R IN
B IN
G IN
PIX
RBRY
BDRY
CLP
B-Y
R-Y
Y
COL
HUE
SUB HUE
SUB COL
SUB CONT
NT/PAL
COM/VID
EX R-Y
EX B-Y
EX Y
FSC OUT
32FH OUT
32FH
44.3
3.58
HD
AFC
60/50
358/443
VD
H/HV
V
CP
SOG
R-Y/R,B-Y/B,Y/G
RGB/VIDEO
Y,R-Y,B-Y
DACCS, VS,VSIN,ASCK,ASDTX, V SYNC MODE,SCL,SDA
YC MODE
RGB1/RGB2
V POL
H POL
HSIN
VSIN
HD
HD MUTE

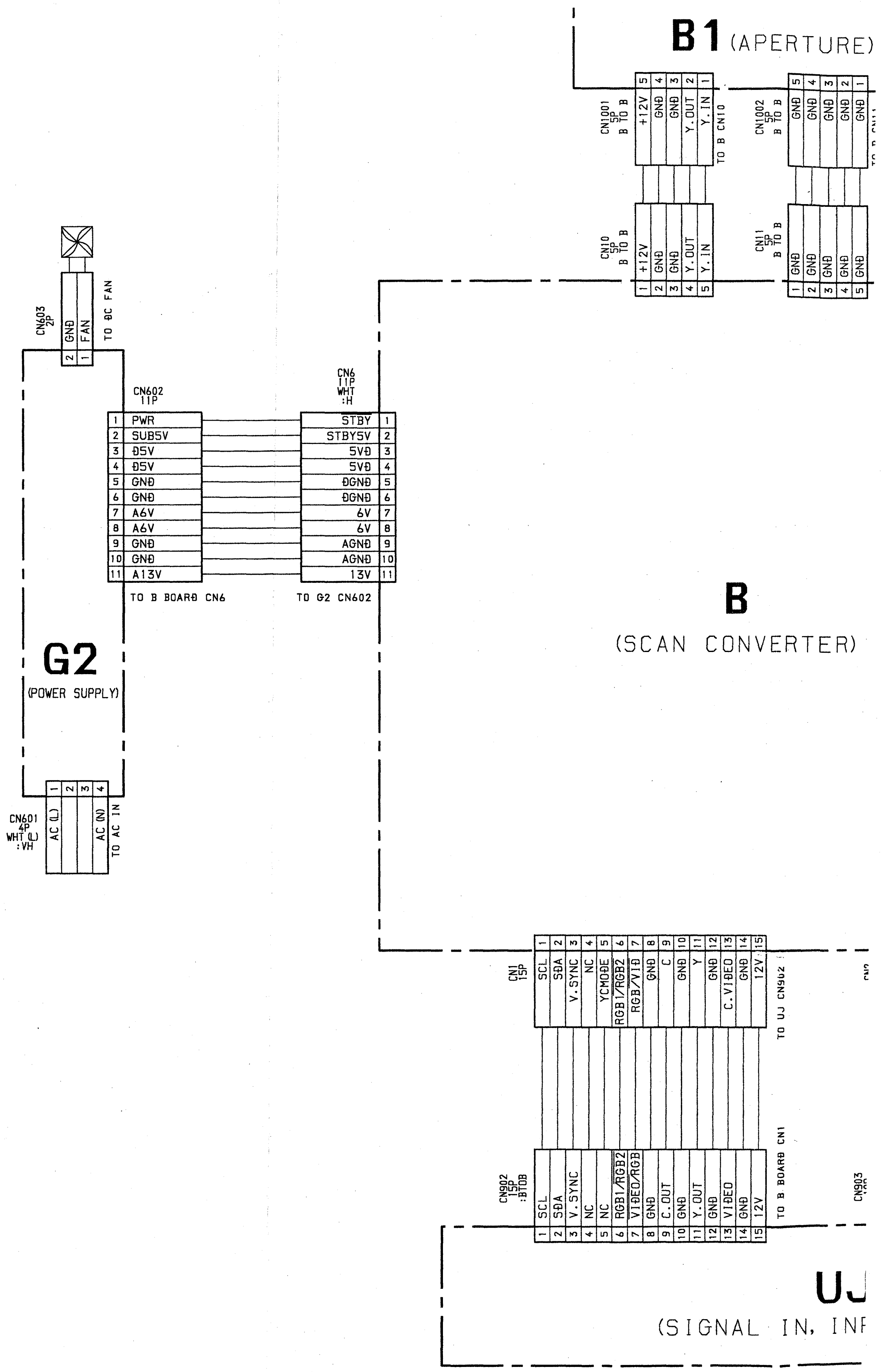

BUFF Q613
IC510 REG
IC509 REG
IC511 A/D CONV.
DATA BUS
IC514 NOR/OR GATE
IC518 NAND
IC517 BUS BUFF
IC507 NAND
IC250 (1/2) SYSTEM CONTROL
IC267 INV.
IC268 INV.
IC278 INV.
IC277 D-FF
IC275 D-FF
IC276 D-FF
IC200 D-FF
IC201 LINE MEMORY
IC202 LINE MEMORY
IC208 D-FF
IC203 FRAME MEMORY
IC204 FRAME MEMORY
IC205 FRAME MEMORY
IC206 FRAME MEMORY
IC207 SCAN CONVERTER
IC703 D/A CONV.
IC251 MEMORY
R DATA
B DATA
G DATA
AMP/ Q713, 716, 727,
AMP/ Q711, 714, 723,
AMP/ Q712, 715, 725,
R
B
G
LMWCK
RSTWA
LMWEA
LMRCKA
RSTRA
RSTRB
LMRCKB
LMWEB
FMRCKB
FMRCKA
FMWCKA
FMWCKB
FMWEA
FMWEB
FMWEC
FMWED
WRSA
WRSB
WLRSA
WLRSB
CGRA
CGRB
RRSA
RRSB
RRSC
RRSD
RLRSA
RLRSB
RCLR
WCLR
LTCK 2
ADOE
VDOE
ADOVF
CLR
CLR, VDOE, ADOVF
ADDEN
MUTE
BLKNG
VDFCK
DEN
RDEN
SCK
SDTX
SDRX
LDCK
COEFLD
RCS
BCS
GCS
VSIN
SDRX, SDTX
COEFLD, BLKNG, LOCK, RDEN, DEN, SDRX, SDTX, SCK, VDFCK
RDO−7
RDO−3
IC268 INV.

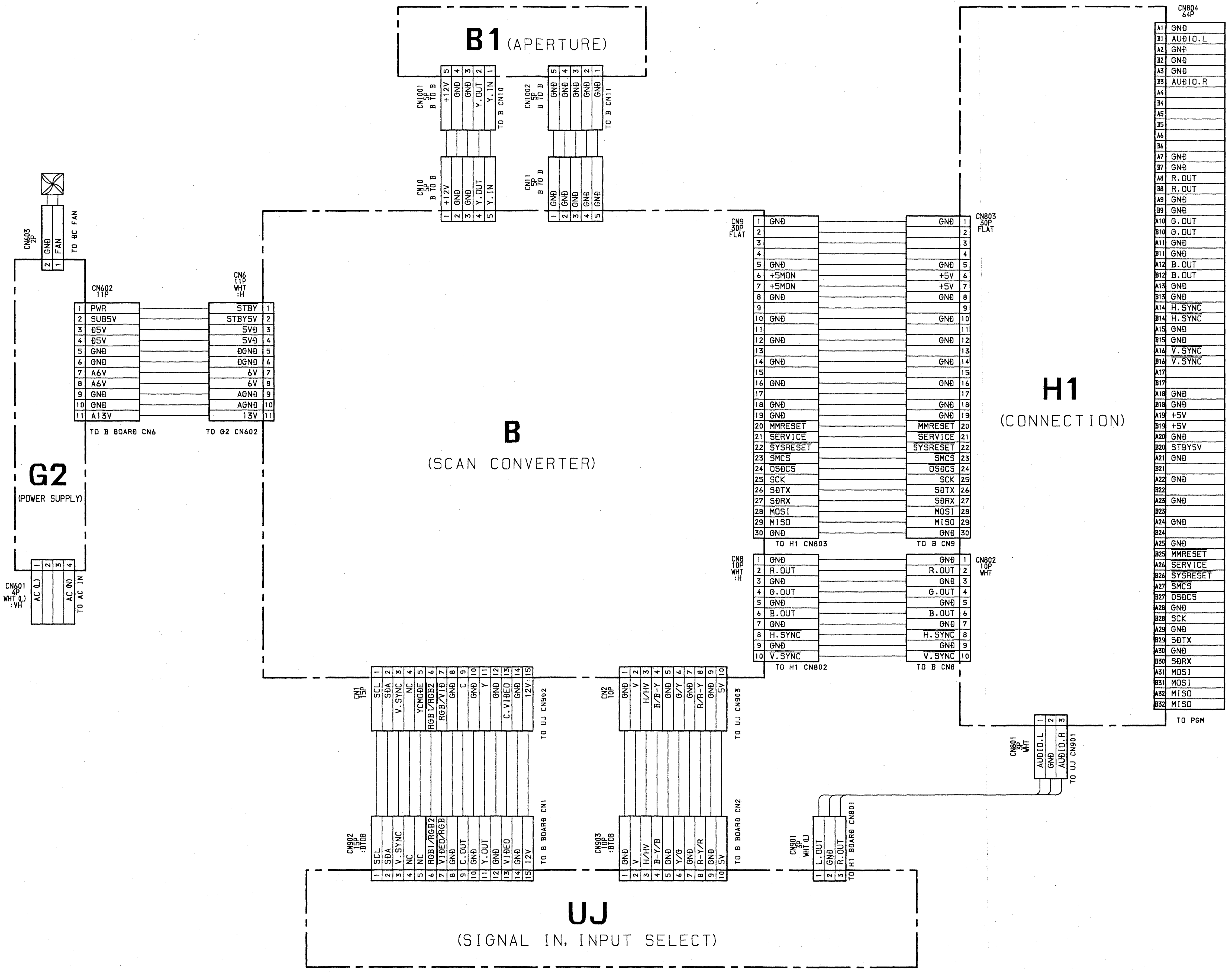

IC703
D/A CONV.
R DATA
B DATA
G DATA
AMP/BUFF
Q713, 716, 727, 733, 739, 749
Q711, 714, 723, 729, 735, 747
Q712, 715, 725, 731, 739, 748
IC710
RGB MATRIX
R IN
B IN
G IN
R OUT
B OUT
G OUT
CLP
BUFF
Q755
Q753
Q754
IC711
MULTI VIBRATOR
IC268
INV.
DATA BUS
IC251
MEMORY
RDO－7
RDO－3
ADDRESS BUS
IC280
DATA SEL
IC273
INV.
IC259
INV.
IC250
SYSTEM CONTROL
COEFLD
BLKNG
LDCK
RDEN
DEN
SDRX
SDTX
SCK
VDFCK
COEFLD, BLKNG, LOCK, RDEN, DEN, SDRX, SDTX, SCK, VDFCK
IC265
SYNC SEP.
IC266
NAND
IC267
INV.
IC272
VCO OUT
IC261
INV.
IC271
DATA SEL.
IC264
CLOCK GENERATOR
X251
14.32 MHz
X250
19.66MHz
IC270
D－FF
IC252
SYSTEM CONTROL
XTAL
EXTAL
VCO CLK
VCO DATA
PLL
CTL CS
MUTE
PASS
H SYNC
SDA
AD OVF
SCL
DAC CS
HD MUTE
SOG
V SYNC MODE
ADDEN
V POL
H POL
V SYNC
GVDF CS
BVDF CS
RVDF CS
MM RESET
SERVICE
S RESET
SMCS
OSDCS
IC260 INV.
CN252
IC258
RECEIVER
SCI OUT
SCI IN
SDTX
SCK
IC256
ROM
IC257
ROM
IC254
ROM
IC255
ROM
IC253
RESET
WDT
RESET
ROM4 CS
ROM3 CS
ROM2 CS
ROM1 CS
IC279
ROM
ALARM
POWCTL
LED DRIVE
Q1
D1
IC262
INV.
MUTE, VDOE
HSIN, SDA, SCL, ADOVF, DACCS, HD MUTE, SOG, V SYNC MODE, ADDEN, V POL, H POL, VS
RCS, BCS, GCS
RCS
BCS
GCS
SDRX, SDTX
VSIN
HD
CLR
VDOE
SDRX
ASCK
ASDTX
SDTX
CN8
R OUT
B OUT
G OUT
H SYNC
V SYNC
CN9
SERVICE
SYS RESET
SMCS
OSDCS
MOSI
MISO
SCK
SDTX
SDRX
CN6
PWR
CN802
R IN
B IN
G IN
H SYNC
V SYNC
CN803
MM RESET
SERVICE
SYS RESET
SMCS
OSDCS
MOSI
MISO
SCK
SDTX
SDRX
CN801
AUDIO.L
AUDIO.R
A
FROM
UJ BOARD
CN901
H1
CN601
AC(L)
AC(N)
T601
LFT
D672
STBY
D671
OCP
IC670
COMPARATOR
CN602
PWR
G2 (POWER SU


BUFF Q755
BUFF Q753
BUFF Q754
IC711 MULTI VIBRATOR
IC273 INV.
IC259 INV.
IC252 SYSTEM CONTROL
RA19
RA20
VSO
XTAL
EXTAL
X250 19.66MHz
VCO CLK
VCO DATA
PLL
CTL CS
MUTE
PASS
H SYNC
SDA
AD OVF
SCL
DAC CS
HD MUTE
SOG
V SYNC MODE
ADDEN
V POL
H POL
V SYNC
GVDF CS
BVDF CS
RVDF CS
X251 14.32MHz
IC264 CLOCK GENERATOR
IC271 DATA SEL.
IC266 NAND
IC270 D-FF
IC265 SYNC SEP.
IC267 INV.
IC272 VCO OUT
IC261 INV.
IC262 INV.
IC274 INV.
IC260 INV.
CN252
IC258 RECEIVER
SCI OUT
SCI IN
SDTX
SCK
SDRX
IC256 ROM
IC257 ROM
ROM4 CS
ROM3 CS
IC254 ROM
IC255 ROM
IC253 RESET
WDT
RESET
ROM2 CS
ROM1 CS
IC279 ROM
ALARM
POWCTL
LED DRIVE Q1
D1
MUTE, VDOE
HSIN, SDA, SCL, ADOVF, DACCS, HD MUTE, SOG, V SYNC MODE, ADDEN, V.POL, H POL, VS
RCS, BCS, GCS
HD
VSN
CLR
VDOE
MM RESET
SERVICE
S RESET
SMCS
OSDCS
CN8
R OUT
B OUT
G OUT
H SYNC
V SYNC
CN9
SYS RESET
OSD CS
MOSI
MISO
SCK
SDTX
SDRX
CN6
PWR
CN802
R IN
B IN
G IN
CN803
CN804
TO PGM UN
CN801
AUDIO.L
AUDIO.R
FROM UJ BOARD CN901
H1 (CONNECTION)
CN601
AC(L)
AC(N)
T601 LFT
AC RECT D601
CONVERTER Q601
CONVERTER Q602
T602 PRT
D672 STBY
D671 OCP
+5V
-V
IC672 THERMO COMPENSATION
IC670 COMPARATOR
SOFT START SW Q658
IC650 REG
T603 PIT
D +5V REG Q660
D +5V
A+6V REG Q661
IC671 SUB +5V REG
SUB +5V
A+6V
A+13V REG Q663
A+13V
CN602
PWR
REG SW Q672
PROTECT Q670, 671
PROTECT Q664
PROTECT Q662
G2 (POWER SUPPLY)


H3
(SUB MICON)
CN871 3P WHT :S-MICRO
CN875 2P WHT :S-MICRO
CN877 10P :B-TO-B
CN873 10P WHT-H :S-MICRO
CN872 8P WHT :S-MICRO
CN874 6P WHT-H :S-MICRO
H2
(USER CONTROL)
KEY BOARD UNIT
CN2 10P
CN1 2P
CN3 6P
V
(QUADRA-POLE)
CN901 9P WHT :S-MICRO
QP
CHASSIS
NECK ASSY
DY ASSY
FBT
C
(VIDEO OUT, G2 REG)
TB702 FASTEN
TB701 FASTEN
FOCUS
CN702 6P WHT :MINILOCK
CN701 5P WHT :S-MICRO
CN703 4P WHT :S-MICRO
CN852 8P WHT :S-MICRO
DY1 6P WHT :DY
DY-2 3P WHT :MINI
CN515 6P :S-MICRO
CN507 6P WHT :MINI
CN503 2P WHT :S-MICRO
CN510 32P :B-TO-B
CN501 18P :BTOB-S
CN514 18P :B-TO-B
CN502 10P :B-TO-B
CN518 10P :B-TO-B
CN508 10P :B-TO-B
CN1701 10P :BTOB-S
CN1703 9P WHT-L :S-MICRO
CN1702 10P :BTOB-S
CN509 10P :B-TO-B
CN504 10P WHT :BTOB
CN501 5P WHT :MINI
CN513 4P BLK :S-MICRO
CN502 7P WHT :S-MICRO
D
(DYNAMIC CONVERGENCE, QUADRA-POLE)
DA
(PIN CORR, HDF DRIVE, N/S DRIVE)
A
(V.OUT, H.OUT AUDIO AMP)
A1
(H DRIVE)
CN506 18P :B-TO-B
CN1801 18P :BTOB
CN1804 6P WHT :MINI
CN503 5P WHT :S-MICRO
CN512 5P RED :S-MICRO
CN516 4P :S-MICRO
FOR CHECK
G
(POWER SUPPLY)
DGC
CN603 3P WHT :MINI LOCK
CN604 3P WHT :MINI LOOK
CN608 2P WHT :MINI
CN606 5P WHT :MINI LOCK
CN601 2P :PW-CN
CN607 4P BLK :S-MICRO
CN602 3P :VH
CN605 7P WHT :S-MICRO
CN 2P EL
CN 2P ML
CN 4P F.F
UA
(SIGNAL OUT, SIRCS)
CN1103 8P WHT :S-MICRO
CN1102 5P WHT :S-MICRO
CN1101 14P WHT :S-MICRO
UT
(MICON, RGB DECODER, SYNC SEP, AUDIO CONTROL, D/A CONVERTER, SYNC OSC, PIN DRIVE)
CN511 32P :B-TO-B
CN6 32P
CN7 32P
CN2 8P WHT :S-MICRO
CN8 6P WHT :S-MICRO
CN4 5P WHT :H
CN5 4P WHT :H
CN1 30P FLAT
CN3 14P WHT :S-MICRO
H4
(CONNECTION)
CN901 8P WHT
CN903 64P
CN904 6P WHT :S-MICRO
CN902 30P FLAT
U
8-559532<U


C
(VIDEO OUT, G2 REG)
TB702 FASTEN
TB701 FASTEN
FOCUS
CN702 6P WHT :MINILOCK
CN701 5P WHT :S-MICRO
CN703 4P WHT :S-MICRO
1000V
200V
GND
NC
H1
H2
R
G
B
V.BLK
1K
+12V
NECK ASSY
DY ASSY
FBT
H5
(DATA IN)
CN852 8P WHT :S-MICRO
MISO
MOSI
CN507 6P WHT :MINI
CN8 6P WHT :S-MICRO
R.OUT
G.OUT
B.OUT
CN901 8P WHT
U
(SIGNAL IN)
CN510 32P :B-TO-B
CN6 32P
CN2 8P WHT :S-MICRO
+9V
DMP-CLK
STBY +5V
DMP-DO
DMP-DI
RES
DMP-ID
CN4 5P WHT :H
CN5 4P WHT :H
V.BLK.OUT
IK.RTN
UT
(MICON, RGB DECODER, SYNC SEP, AUDIO CONTROL, D/A CONVERTER, SYNC OSC, PIN DRIVE)
CN1 30P FLAT
CN3 14P WHT :S-MICRO
CN7 32P
CN511 32P :B-TO-B
CN501 18P :BTOB-S
CN514 18P :B-TO-B
A.MUTE
AUDIO.L
AUDIO.GND
AUDIO.R
FAIL-CS
SCL
SDA
ABL
UNDER/OVER
STBY+5V
PIC.TILT
ROT.SW
H.TRPZ
V.P
V.PARA-
V.RAMP
H.BLK
H.PLS
H.SAW-
AFC.PLS
H.PARA-
PIN.DRV
DEGAUSS
PROTECT
H.D
POWER
FBT-5V
FBT-12V
FBT+5V
FBT+12V
+14V
PROT.W
PIN.OUT
HVR (REG)
PIN-F.B
H.PARA-
H.D
PIN.DRV
H.PLS
DRIVE
H.CENT
NC
H.DRV
C.DRV
CN1804 6P WHT :MINI
CN904 6P WHT :S-MICRO
H4
(CONNECTION)
CN903 64P
CN902 30P FLAT
CN801 64P
H.SYNC
V.SYNC
STBY+5V
STBY5V
MMRESET
SERVISE
SERVICE
SYSRESET
SMCS
OSDCS
SCK
SDTX
SDRX
MOSI
MISO
L.OUT
B-SS9532<U/C>-KESSENZU

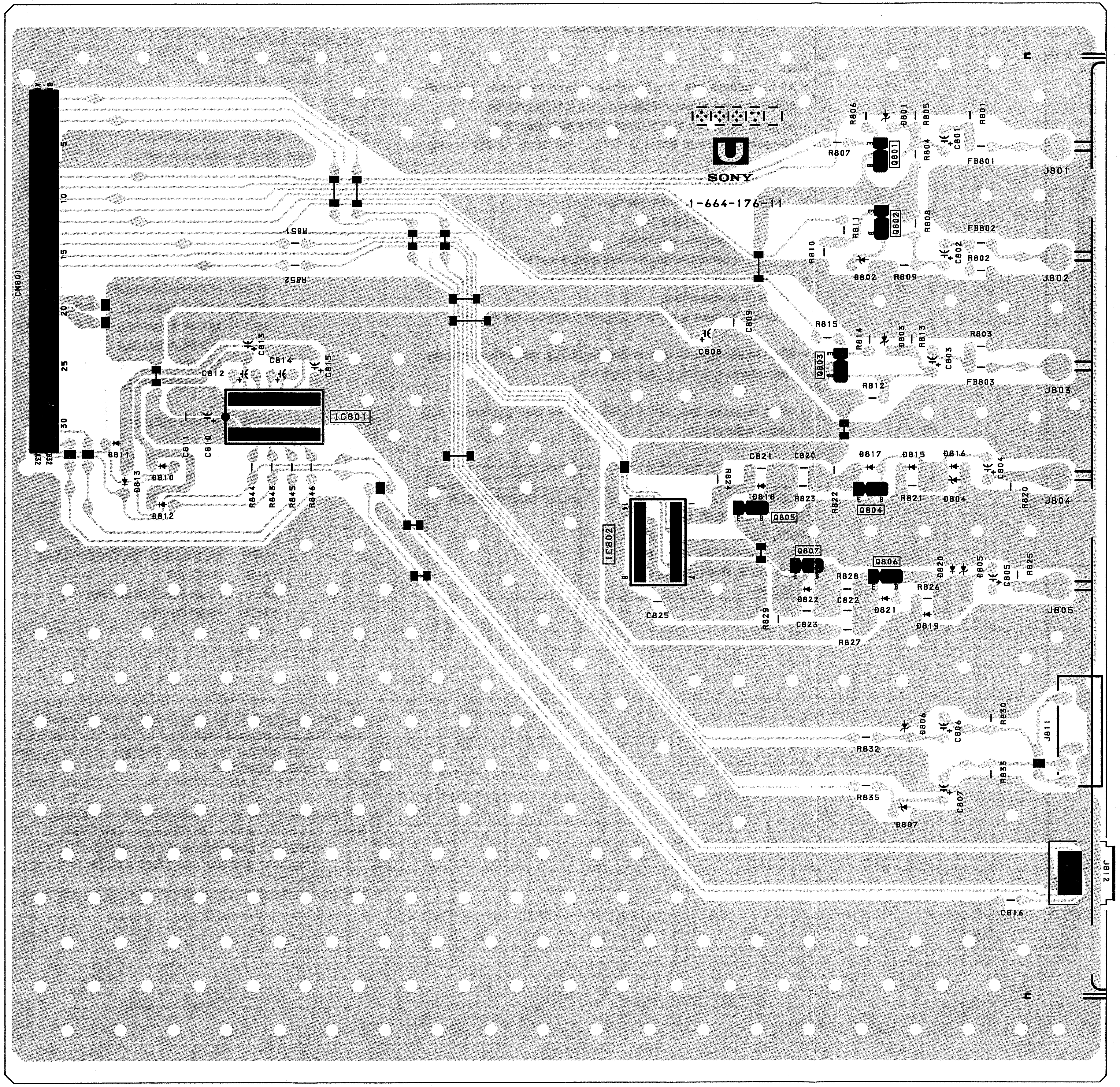

B1
(APERTURE)
CN1001 5P B TO B
CN1002 5P B TO B
TO B CN10
+12V
GND
Y.OUT
Y.IN
CN10 5P B TO B
CN11 5P B TO B
CN603 2P
GND
FAN
TO DC FAN
CN602 11P
CN6 11P WHT :H
PWR
SUBSV
D5V
GND
A6V
A13V
STBY
STBY5V
5VD
DGND
6V
AGND
13V
TO B BOARD CN6
TO G2 CN602
G2
(POWER SUPPLY)
CN601 4P WHT (L) :VH
AC (L)
AC (N)
TO AC IN
B
(SCAN CONVERTER)
CN1 15P
SCL
SDA
V.SYNC
NC
YCMODE
RGB1/RGB2
RGB/VID
VIDEO/RGB
GND
C
Y
C.VIDEO
12V
TO UJ CN902
CN902 15P :BTOB
C.OUT
Y.OUT
VIDEO
TO B BOARD CN1
CN903
UJ
(SIGNAL IN, INP


B1 (APERTURE)
CN1001 5P B TO B
+12V, GND, GND, Y.OUT, Y.IN
TO B CN10
CN1002 5P B TO B
GND, GND, GND, GND, GND
TO B CN11
CN10 5P B TO B
+12V, GND, GND, Y.OUT, Y.IN
CN11 5P B TO B
GND, GND, GND, GND, GND
CN603 2P
GND, FAN
TO θC FAN
CN602 11P
1 PWR, 2 SUB5V, 3 θ5V, 4 θ5V, 5 GND, 6 GND, 7 A6V, 8 A6V, 9 GND, 10 GND, 11 A13V
TO B BOARD CN6
CN6 11P WHT :H
STBY 1, STBY5V 2, 5VD 3, 5VD 4, DGND 5, DGND 6, 6V 7, 6V 8, AGND 9, AGND 10, 13V 11
TO G2 CN602
G2 (POWER SUPPLY)
CN601 4P WHT (L) :VH
AC (L), AC (N)
TO AC IN
B (SCAN CONVERTER)
CN9 30P FLAT
1 GND, 2, 3, 4, 5 GND, 6 +5MON, 7 +5MON, 8 GND, 9, 10 GND, 11, 12 GND, 13, 14 GND, 15, 16 GND, 17, 18 GND, 19 GND, 20 MMRESET, 21 SERVICE, 22 SYSRESET, 23 SMCS, 24 OSDCS, 25 SCK, 26 SDTX, 27 SDRX, 28 MOSI, 29 MISO, 30 GND
TO H1 CN803
CN803 30P FLAT
GND 1, 2, 3, 4, GND 5, +5V 6, +5V 7, GND 8, 9, GND 10, 11, GND 12, 13, GND 14, 15, GND 16, 17, GND 18, GND 19, MMRESET 20, SERVICE 21, SYSRESET 22, SMCS 23, OSDCS 24, SCK 25, SDTX 26, SDRX 27, MOSI 28, MISO 29, GND 30
TO B CN9
CN8 10P WHT :H
1 GND, 2 R.OUT, 3 GND, 4 G.OUT, 5 GND, 6 B.OUT, 7 GND, 8 H.SYNC, 9 GND, 10 V.SYNC
TO H1 CN802
CN802 10P WHT
GND 1, R.OUT 2, GND 3, G.OUT 4, GND 5, B.OUT 6, GND 7, H.SYNC 8, GND 9, V.SYNC 10
TO B CN8
H1 (CONNECTION)
CN804 64P
A1 GND, B1 AUDIO.L, A2 GND, B2 GND, A3 GND, B3 AUDIO.R, A4, B4, A5, B5, A6, B6, A7 GND, B7 GND, A8 R.OUT, B8 R.OUT, A9 GND, B9 GND, A10 G.OUT, B10 G.OUT, A11 GND, B11 GND, A12 B.OUT, B12 B.OUT, A13 GND, B13 GND, A14 H.SYNC, B14 H.SYNC, A15 GND, B15 GND, A16 V.SYNC, B16 V.SYNC, A17, B17, A18 GND, B18 GND, A19 +5V, B19 +5V, A20 GND, B20 STBY5V, A21 GND, B21, A22 GND, B22, A23 GND, B23, A24 GND, B24, A25 GND, B25 MMRESET, A26 SERVICE, B26 SYSRESET, A27 SMCS, B27 OSDCS, A28 GND, B28 SCK, A29 GND, B29 SDTX, A30 GND, B30 SDRX, A31 MOSI, B31 MOSI, A32 MISO, B32 MISO
TO PGM
CN801 3P WHT
AUDIO.L, GND, AUDIO.R
TO UJ CN901
CN1 15P
SCL 1, SDA 2, V.SYNC 3, NC 4, YCMODE 5, RGB1/RGB2 6, RGB/VID 7, GND 8, C 9, GND 10, Y 11, GND 12, C.VIDEO 13, GND 14, 12V 15
TO UJ CN902
CN2 10P
GND 1, V 2, H/HV 3, B/B-Y 4, GND 5, G/Y 6, GND 7, R/R-Y 8, GND 9, 5V 10
TO UJ CN903
CN902 15P :BTOB
1 SCL, 2 SDA, 3 V.SYNC, 4 NC, 5 NC, 6 RGB1/RGB2, 7 VIDEO/RGB, 8 GND, 9 C.OUT, 10 GND, 11 Y.OUT, 12 GND, 13 VIDEO, 14 GND, 15 12V
TO B BOARD CN1
CN903 10P :BTOB
1 GND, 2 V, 3 H/HV, 4 B-Y/B, 5 GND, 6 Y/G, 7 GND, 8 R-Y/R, 9 GND, 10 5V
TO B BOARD CN2
CN901 3P WHT (L)
1 L.OUT, 2 GND, 3 R.OUT
TO H1 BOARD CN801
UJ (SIGNAL IN, INPUT SELECT)

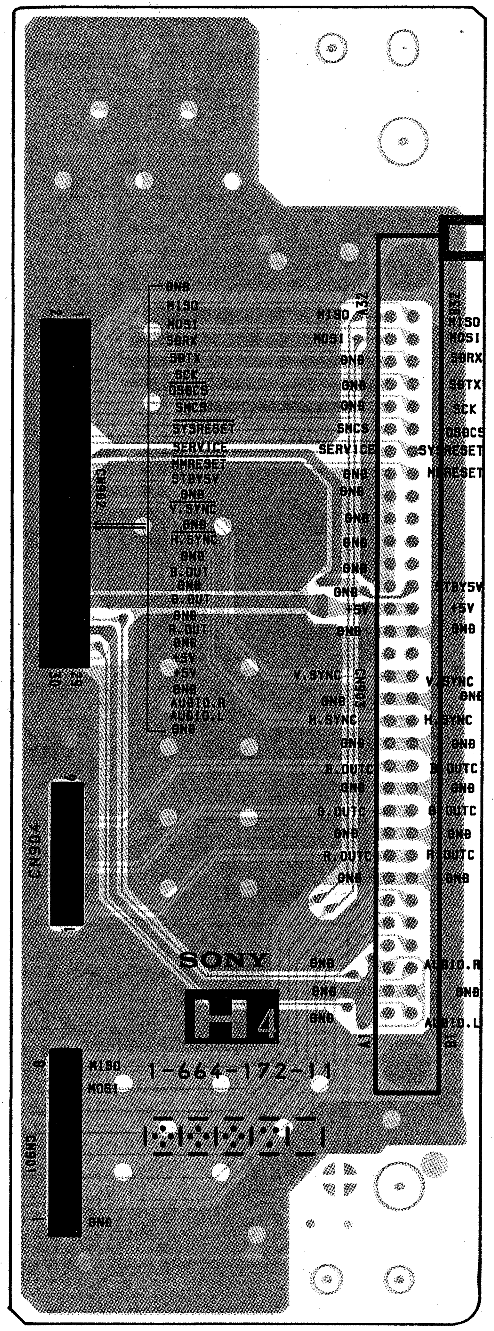
U [SIGNAL IN]

H4 [CONNECTION]

– U BOARD –


CN801
IC801
IC802
SONY
1-664-176-11
J801
J802
J803
J804
J805
J811
J812
FB801
FB802
FB803
Q801
Q802
Q803
Q804
Q805
Q806
Q807
C808
C809
C812
C813
C814
C815
C816
C820
C821
C822
C823
C825
R807
R809
R812
R815
R821
R823
R826
R827
R828
R832
R835
R843
R844
R845
R846

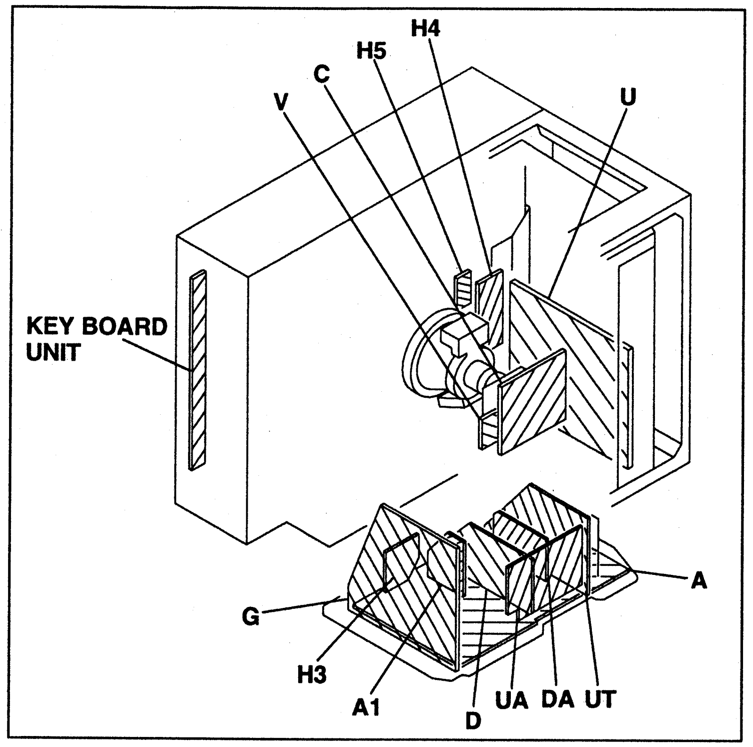
– H4 BOARD –


CN902
CN903
CN904
CN901
SONY
H4
1-664-172-11
MISO
MOSI
SBRX
SBTX
SCK
DSBCS
SNCS
SYSRESET
SERVICE
NMRESET
STBYSV
V.SYNC
H.SYNC
B.OUT
G.OUT
R.OUT
AUDIO.R
AUDIO.L
GND
+5V

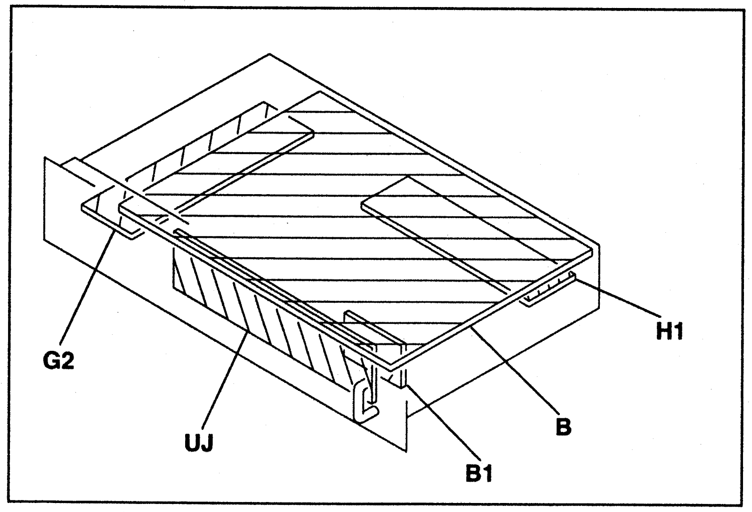
- ░ : Pattern from the side which enables seeing.
- ▒ : Pattern of the rear side.

8-3. CIRCUIT BOARDS LOCATION

PGM-200R1U/200R1E/200R1A



BKM-201SC



8-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics.
- All electrolytics are in 50V unless otherwise specified.
- All resistors are in ohms, 1/4W in resistance, 1/10W in chip resistance.
  kΩ = 1000Ω, MΩ = 1000kΩ
- –▭– : nonflammable resistor.
- –⌇∿– : fusible resistor.
- △ : internal component.
- ▭ : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- # marked in these schematic diagrams signifies not mounted.

- When replacing components identified by ◪, make the necessary adjustments indicated. (see Page 43)

- When replacing the part in below table,be sure to perfome the related adjustment.

Part replaced (◪)	
IC550, IC551, Q517, Q518, D560, D562, D563, R550, R551, R554, R555, R556, R558, R559, R560, R561, R562, R563, R564, R584, R585, R609, R684, R685, C641 G MOUNT	HOLD DOWN CHECK

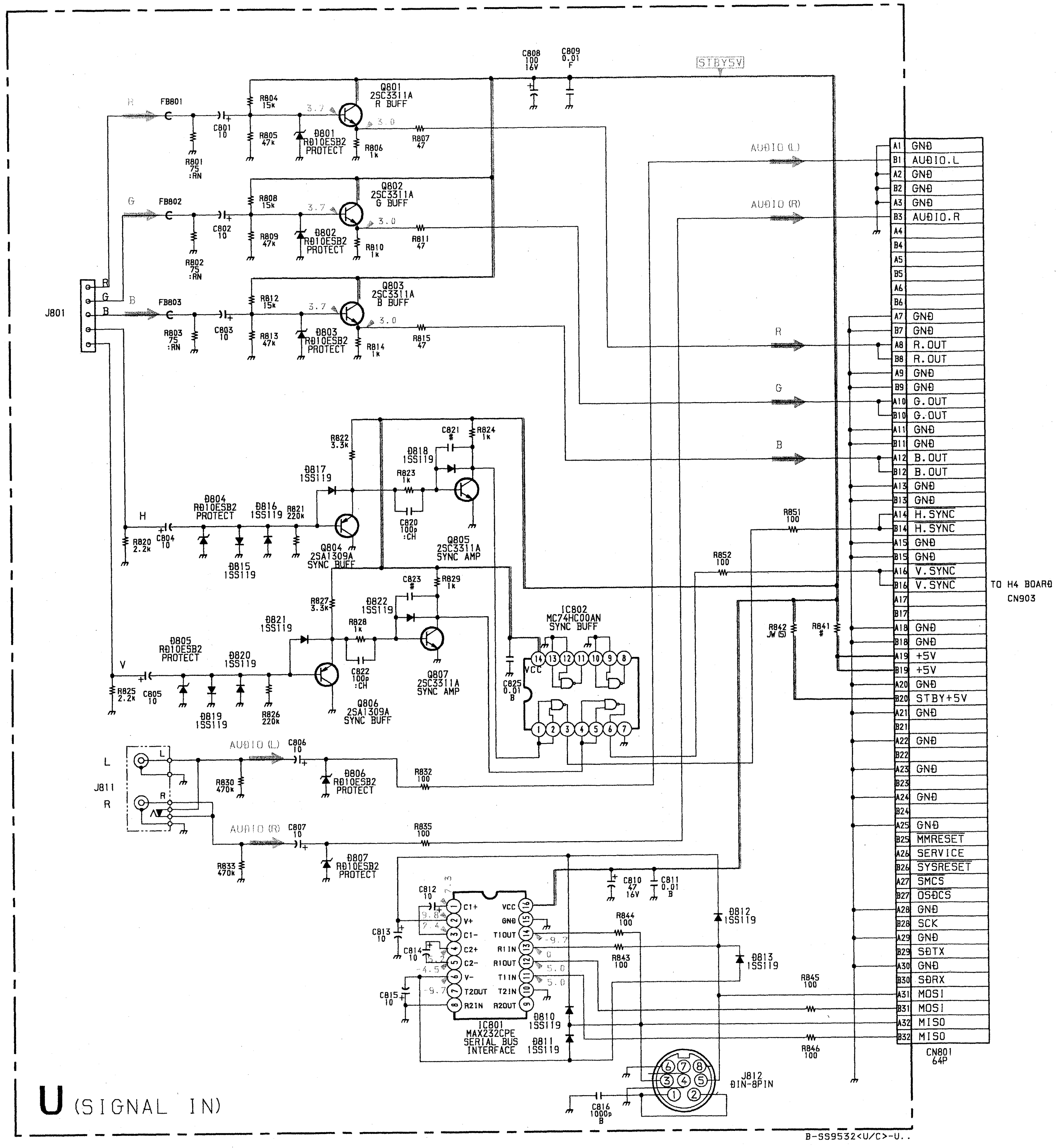
- Voltage value is the reference value between it and the earth, when color bar signal is received from color bar generator (digital multimeter used : 10M ohms/V DC).
- Unit of voltage values is V (volt).
- ∗ : Measurement disabled.
- ▬▬ : B + line.
- ▬ ▬ ▬ : B – line.
  (Actual measured value may be different).
- Circled numbers are waveform references.
- ➡ : Signal Path.

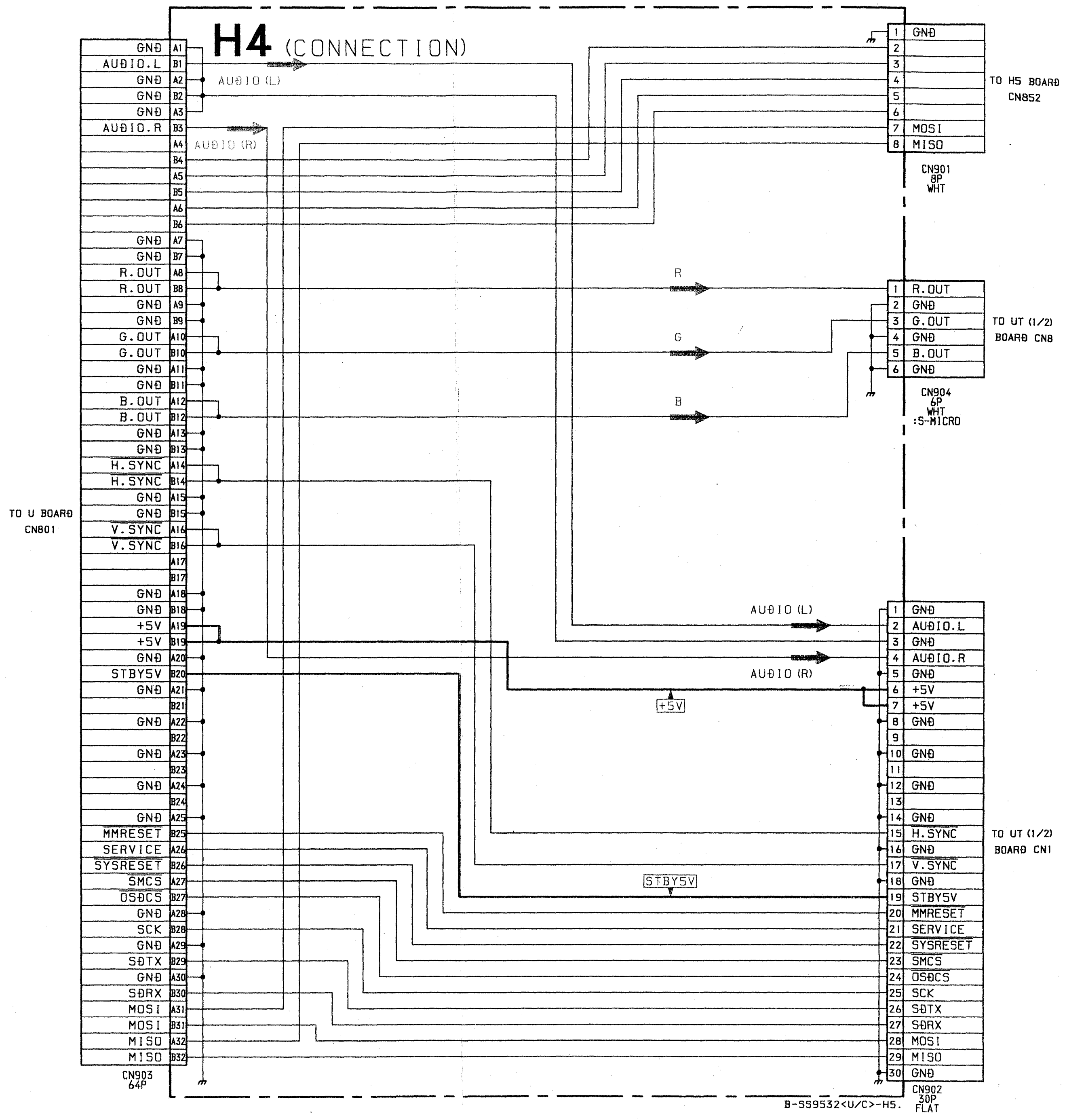
Reference information

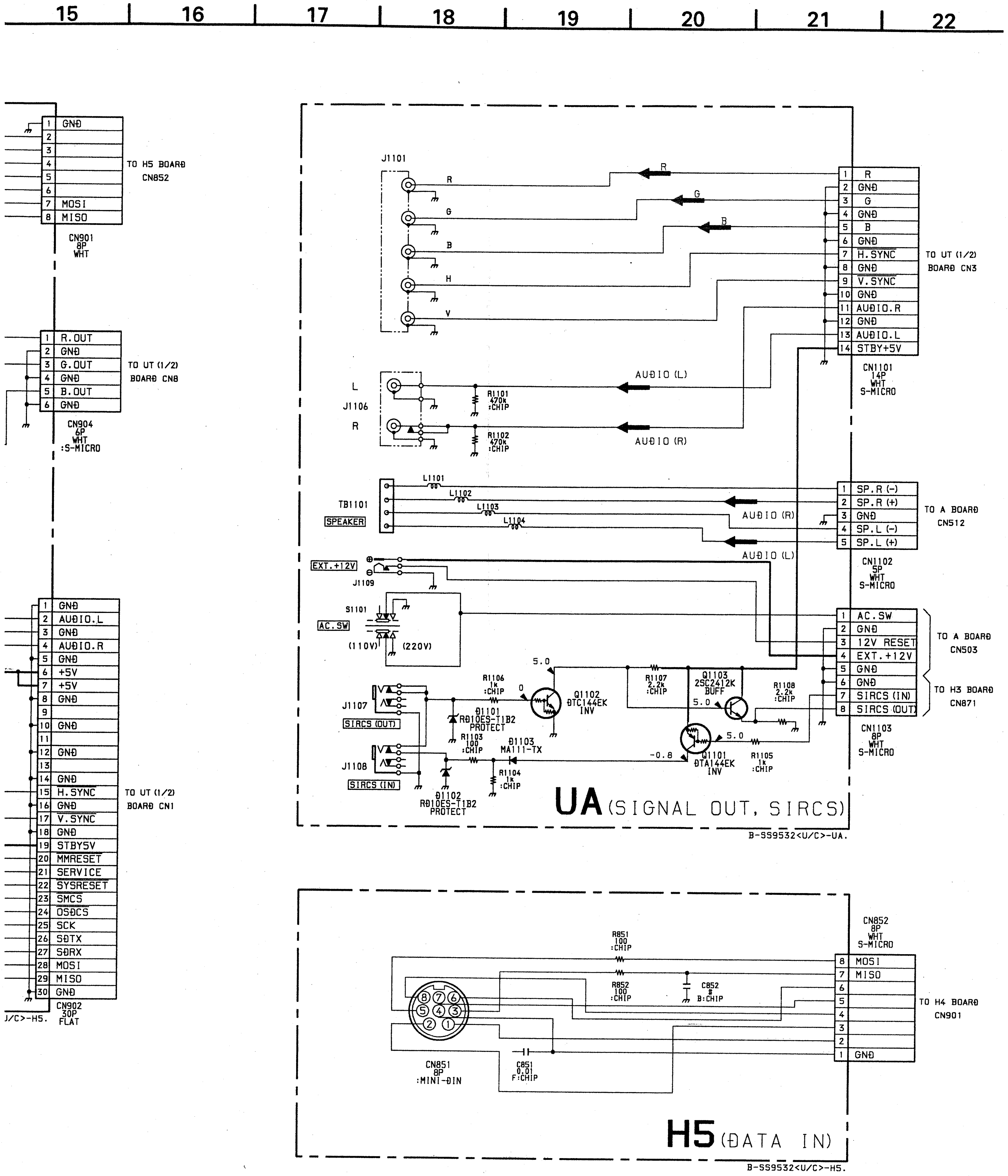
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFRAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The component identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.


U (SIGNAL IN)
J801
R
G
B
FB801
FB802
FB803
C801 10
C802 10
C803 10
R801 75 :RN
R802 75 :RN
R803 75 :RN
R804 15k
R805 47k
R808 15k
R809 47k
R812 15k
R813 47k
Q801 2SC3311A R BUFF
Q802 2SC3311A G BUFF
Q803 2SC3311A B BUFF
D801 RD10ESB2 PROTECT
D802 RD10ESB2 PROTECT
D803 RD10ESB2 PROTECT
R806 1k
R807 47
R810 1k
R811 47
R814 1k
R815 47
C808 100 16V
C809 0.01 F
STBY5V
AUDIO (L)
AUDIO (R)
H
V
R820 2.2k
C804 10
D804 RD10ESB2 PROTECT
D815 1SS119
D816 1SS119
R821 220k
D817 1SS119
R822 3.3k
D818 1SS119
R823 1k
C820 100p :CH
C821 B
R824 1k
Q804 2SA1309A SYNC BUFF
Q805 2SC3311A SYNC AMP
R825 2.2k
C805 10
D805 RD10ESB2 PROTECT
D819 1SS119
D820 1SS119
R826 220k
D821 1SS119
R827 3.3k
D822 1SS119
R828 1k
C822 100p :CH
C823 B
R829 1k
Q806 2SA1309A SYNC BUFF
Q807 2SC3311A SYNC AMP
IC802 MC74HC00AN SYNC BUFF
C825 0.01 B
VCC
R851 100
R852 100
R842 JW
R841
J811
L
R
R830 470k
R833 470k
AUDIO (L) C806 10
AUDIO (R) C807 10
D806 RD10ESB2 PROTECT
D807 RD10ESB2 PROTECT
R832 100
R835 100
C812 10
C813 10
C814 10
C815 10
C1+ V+ C1- C2+ C2- V- T2OUT R2IN
VCC GND T1OUT R1IN R1OUT T1IN T2IN R2OUT
IC801 MAX232CPE SERIAL BUS INTERFACE
C810 47 16V
C811 0.01 B
R844 100
R843 100
D810 1SS119
D811 1SS119
D812 1SS119
D813 1SS119
R845 100
R846 100
J812 DIN-8PIN
C816 1000p B
A1 GND
B1 AUDIO.L
A2 GND
B2 GND
A3 GND
B3 AUDIO.R
A7 GND
B7 GND
A8 R.OUT
B8 R.OUT
A9 GND
B9 GND
A10 G.OUT
B10 G.OUT
A11 GND
B11 GND
A12 B.OUT
B12 B.OUT
A13 GND
B13 GND
A14 H.SYNC
B14 H.SYNC
A15 GND
B15 GND
A16 V.SYNC
B16 V.SYNC
A18 GND
B18 GND
A19 +5V
B19 +5V
A20 GND
B20 STBY+5V
A21 GND
A22 GND
A23 GND
A24 GND
A25 GND
B25 MMRESET
A26 SERVICE
B26 SYSRESET
A27 SMCS
B27 OSDCS
A28 GND
B28 SCK
A29 GND
B29 SDTX
A30 GND
B30 SDRX
A31 MOSI
B31 MOSI
A32 MISO
B32 MISO
CN801 64P
TO H4 BOARD CN903
B-SS9532<U/C>-U..

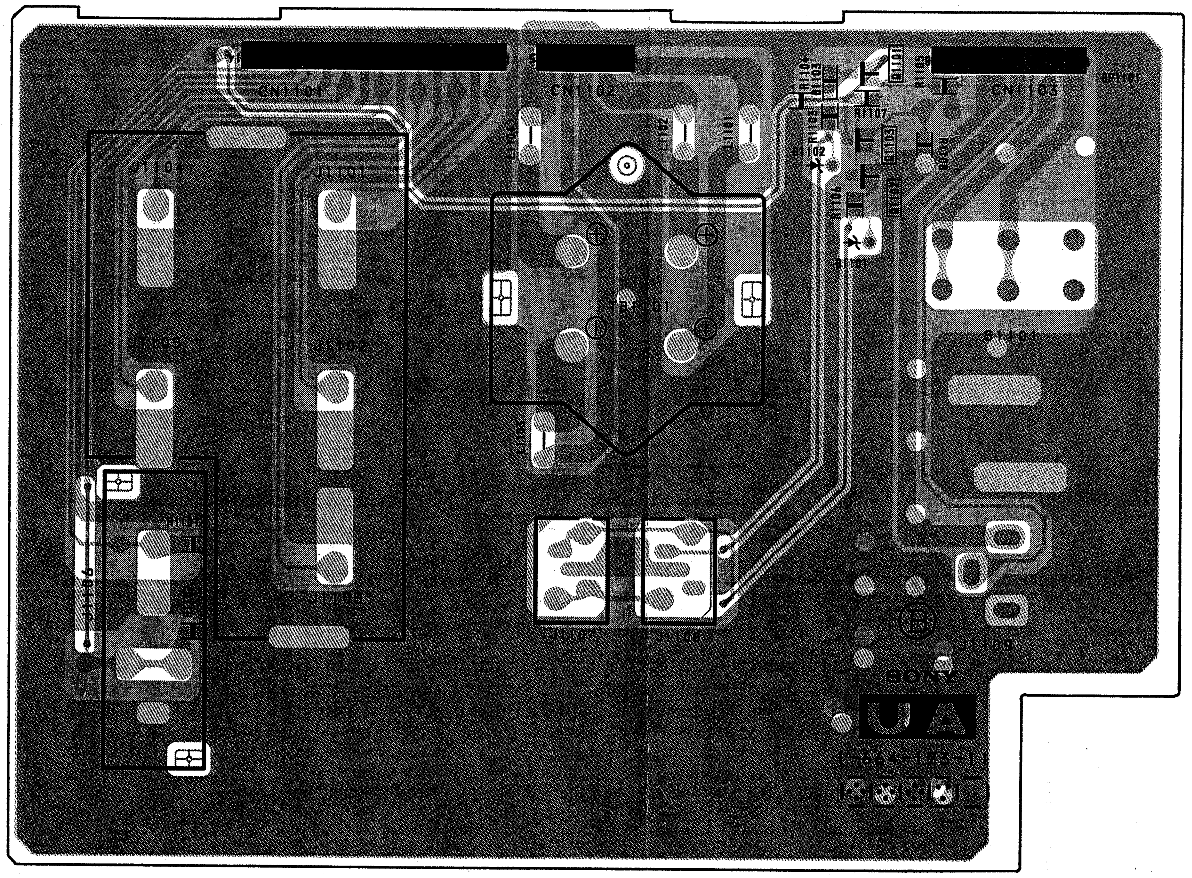

H4 (CONNECTION)
TO U BOARD CN801
CN903 64P
A1 GND
B1 AUDIO.L
A2 GND
B2 GND
A3 GND
B3 AUDIO.R
A7 GND
B7 GND
A8 R.OUT
B8 R.OUT
A9 GND
B9 GND
A10 G.OUT
B10 G.OUT
A11 GND
B11 GND
A12 B.OUT
B12 B.OUT
A13 GND
B13 GND
A14 H.SYNC
B14 H.SYNC
A15 GND
B15 GND
A16 V.SYNC
B16 V.SYNC
A18 GND
B18 GND
A19 +5V
B19 +5V
A20 GND
B20 STBY5V
A21 GND
A22 GND
A23 GND
A24 GND
A25 GND
B25 MMRESET
A26 SERVICE
B26 SYSRESET
A27 SMCS
B27 OSDCS
A28 GND
B28 SCK
A29 GND
B29 SDTX
A30 GND
B30 SDRX
A31 MOSI
B31 MOSI
A32 MISO
B32 MISO
AUDIO (L)
AUDIO (R)
R
G
B
+5V
STBY5V
1 GND
2
3
4
5
6
7 MOSI
8 MISO
CN901 8P WHT
TO H5 BOARD CN852
1 R.OUT
2 GND
3 G.OUT
4 GND
5 B.OUT
6 GND
CN904 6P WHT :S-MICRO
TO UT (1/2) BOARD CN8
1 GND
2 AUDIO.L
3 GND
4 AUDIO.R
5 GND
6 +5V
7 +5V
8 GND
9
10 GND
11
12 GND
13
14 GND
15 H.SYNC
16 GND
17 V.SYNC
18 GND
19 STBY5V
20 MMRESET
21 SERVICE
22 SYSRESET
23 SMCS
24 OSDCS
25 SCK
26 SDTX
27 SDRX
28 MOSI
29 MISO
30 GND
CN902 30P FLAT
TO UT (1/2) BOARD CN1
B-SS9532<U/C>-H5.


15
16
17
18
19
20
21
22
GND
MOSI
MISO
TO H5 BOARD CN852
CN901 8P WHT
R.OUT
GND
G.OUT
GND
B.OUT
GND
TO UT (1/2) BOARD CN8
CN904 6P WHT :S-MICRO
GND
AUDIO.L
GND
AUDIO.R
GND
+5V
+5V
GND
GND
GND
GND
H.SYNC
GND
V.SYNC
GND
STBY5V
MMRESET
SERVICE
SYSRESET
SMCS
OSDCS
SCK
SDTX
SDRX
MOSI
MISO
GND
CN902 30P FLAT
TO UT (1/2) BOARD CN1
J/C>-H5.
J1101
R
G
B
H
V
R
GND
G
GND
B
GND
H.SYNC
GND
V.SYNC
GND
AUDIO.R
GND
AUDIO.L
STBY+5V
TO UT (1/2) BOARD CN3
CN1101 14P WHT S-MICRO
L
J1106
R
R1101 470k :CHIP
R1102 470k :CHIP
AUDIO (L)
AUDIO (R)
TB1101
SPEAKER
L1101
L1102
L1103
L1104
SP.R (-)
SP.R (+)
GND
SP.L (-)
SP.L (+)
AUDIO (R)
AUDIO (L)
TO A BOARD CN512
CN1102 5P WHT S-MICRO
EXT.+12V
J1109
S1101
AC.SW
(110V)
(220V)
AC.SW
GND
12V RESET
EXT.+12V
GND
GND
SIRCS (IN)
SIRCS (OUT)
TO A BOARD CN503
TO H3 BOARD CN871
CN1103 8P WHT S-MICRO
5.0
R1106 1k :CHIP
0
Q1102 DTC144EK INV
R1107 2.2k :CHIP
Q1103 2SC2412K BUFF
R1108 2.2k :CHIP
5.0
5.0
J1107
SIRCS (OUT)
D1101 RD10ES-T1B2 PROTECT
R1103 100 :CHIP
D1103 MA111-TX
-0.8
Q1101 DTA144EK INV
R1105 1k :CHIP
J1108
SIRCS (IN)
R1104 1k :CHIP
D1102 RD10ES-T1B2 PROTECT
UA (SIGNAL OUT, SIRCS)
B-SS9532<U/C>-UA.
R851 100 :CHIP
R852 100 :CHIP
C852 B :CHIP
CN852 8P WHT S-MICRO
MOSI
MISO
GND
TO H4 BOARD CN901
CN851 8P :MINI-DIN
C851 0.01 F:CHIP
H5 (DATA IN)
B-SS9532<U/C>-H5.

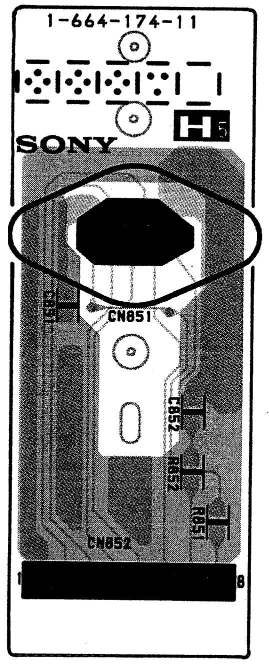
UA [SIGNAL OUT, SIRCS]

H5 [DATA IN]

– UA BOARD –


CN1101
CN1102
CN1103
J1101
J1106
J1107
J1108
J1109
TB1101
S1101
R1107
SONY
UA
1-664-173-11

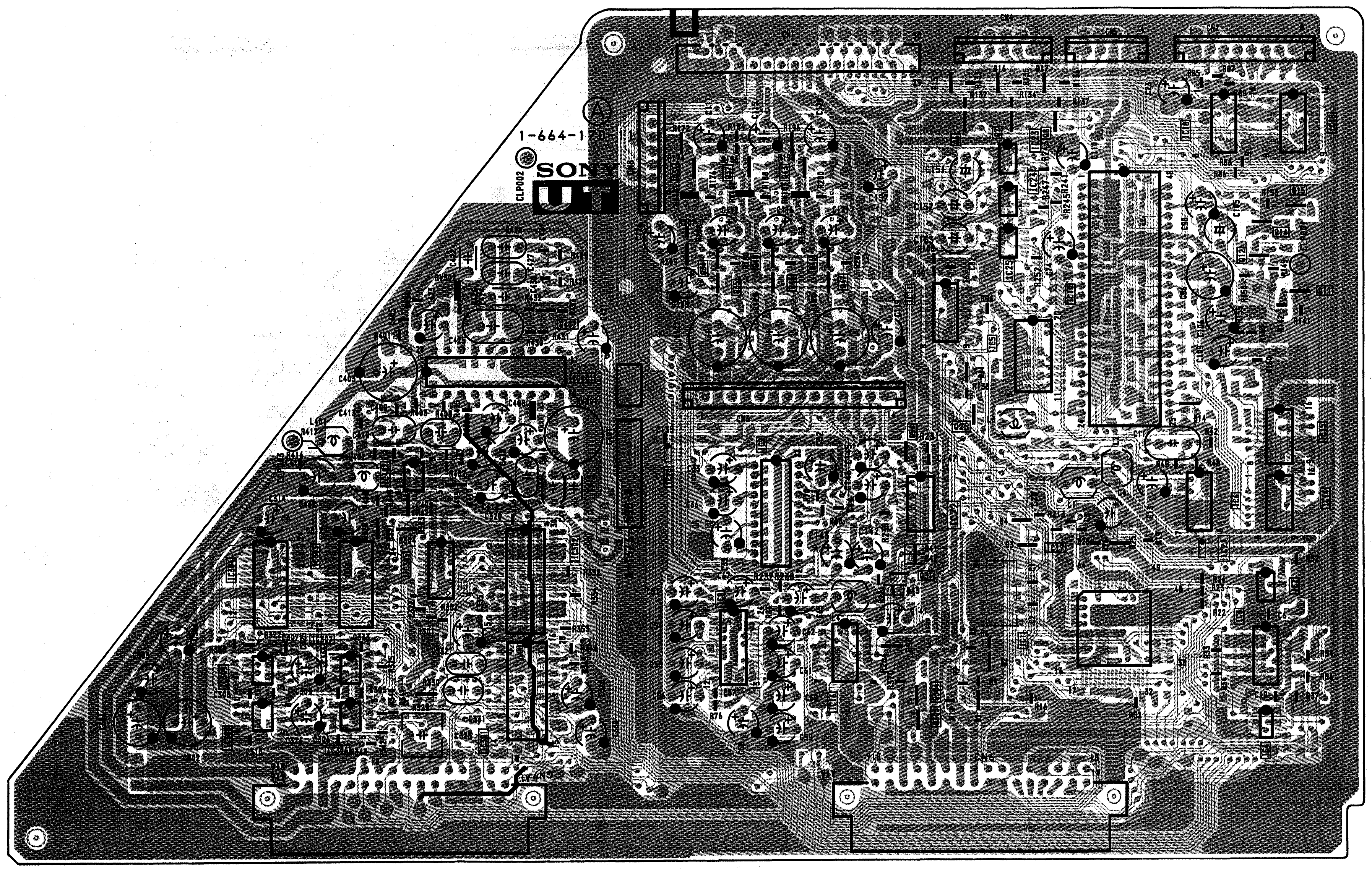
– H5 BOARD –


1-664-174-11
SONY
H5
CN851
C851
C852
R852
R851
CN852
8

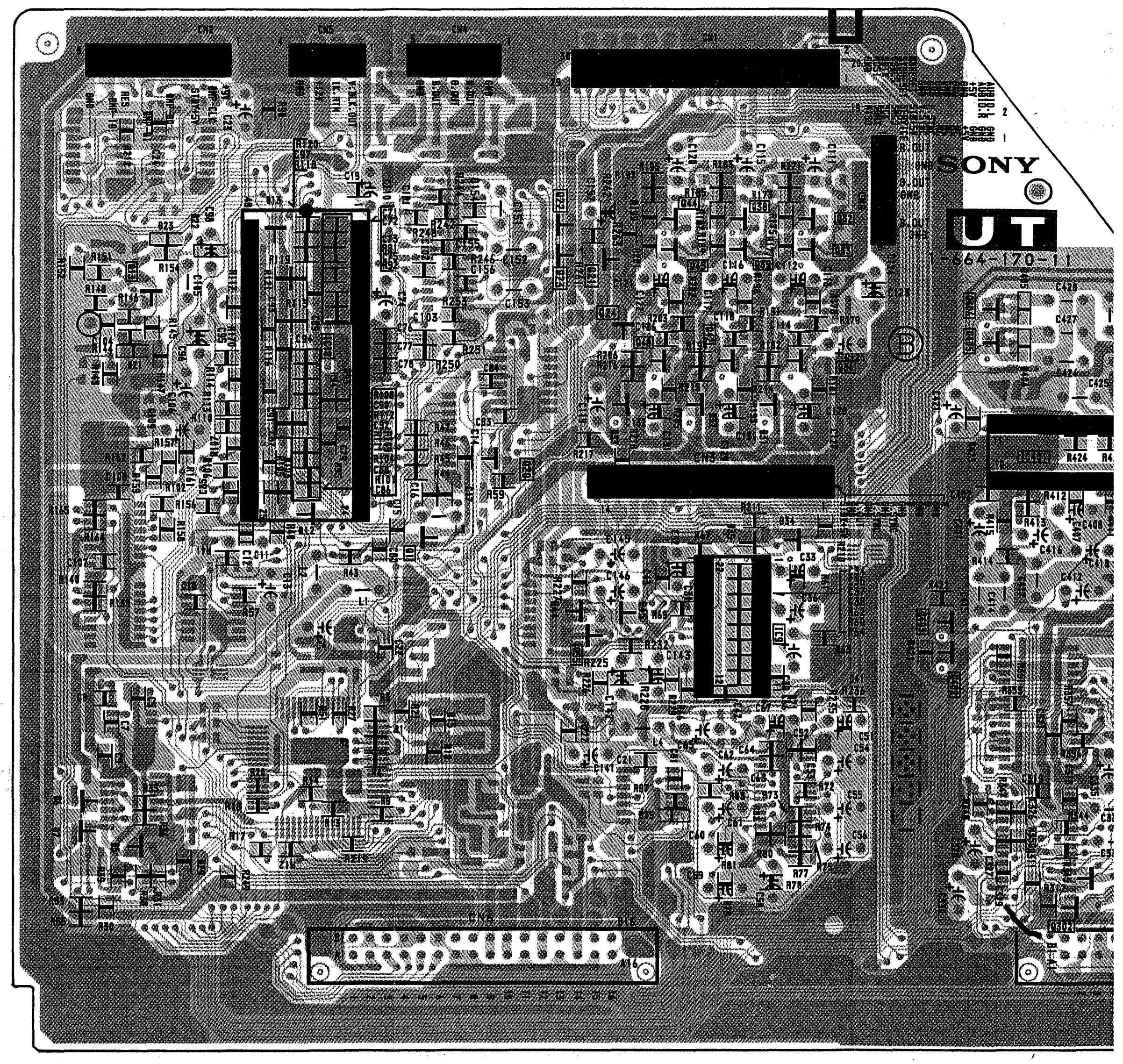
- ▒ : Pattern from the side which enables seeing.
- ▓ : Pattern of the rear side.

UT [MICON, RGB DECODER, SYNC SEP, AUDIO CONTROL, D/A CONVERTER, SYNC OSC, PIN DRIVE]

– **UT BOARD** – <Component Side>

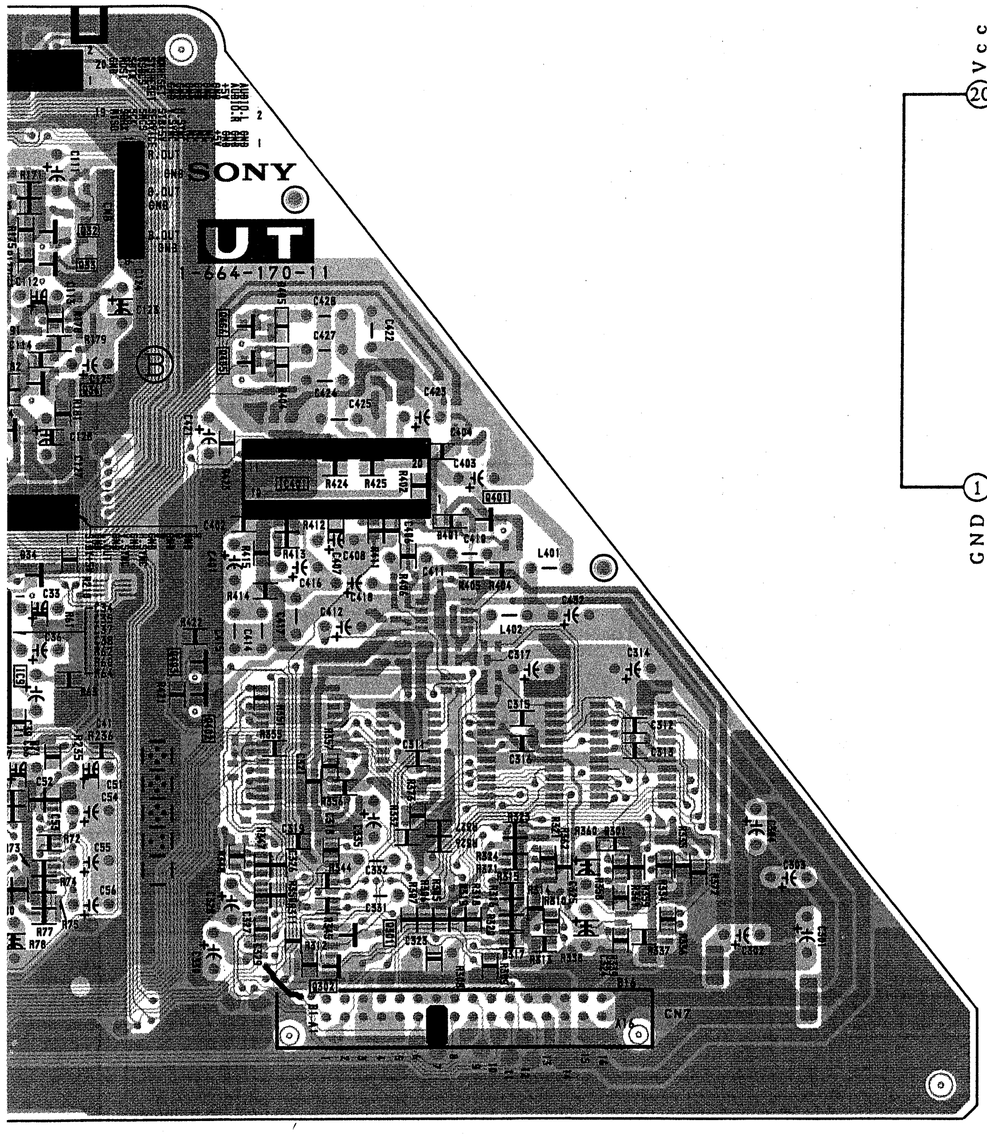

A
1-664-170-
SONY
UT
CLP002

<Conductor Side>


SONY
UT
664-170-11
B

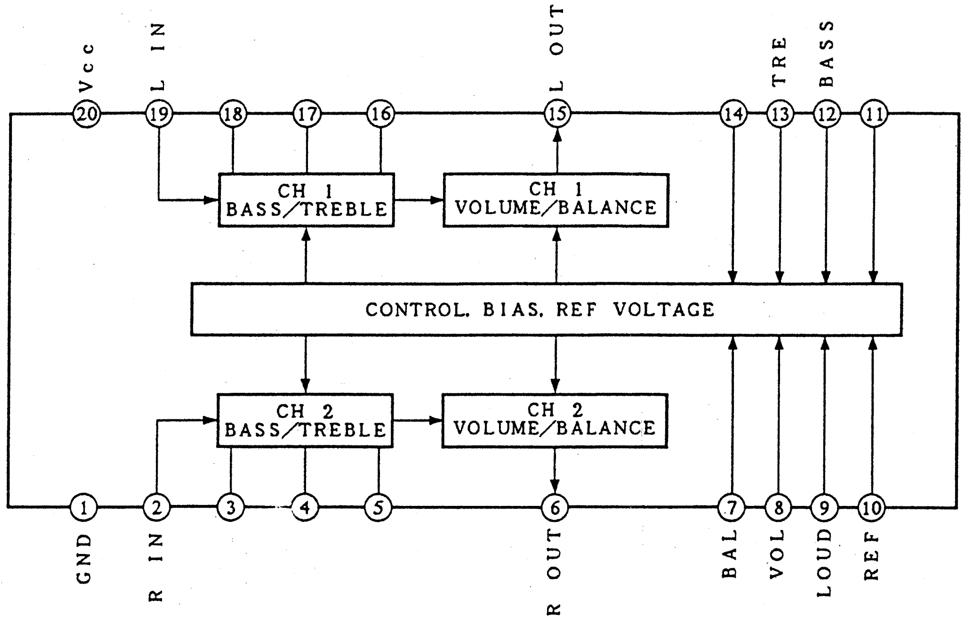
- ▨ : Pattern
- ▨ : Pattern

Schematic diagrams
← H4, H5, U, UA, **boards**

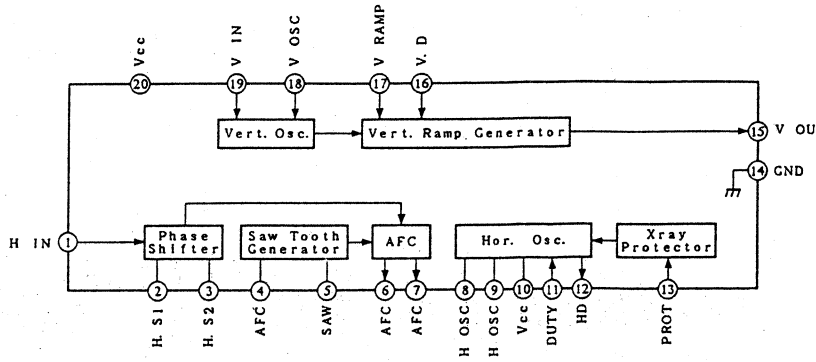

SONY
UT
1-664-170-11
CN7

- ▨ : Pattern from the side which enables seeing.
- ■ : Pattern of the rear side.

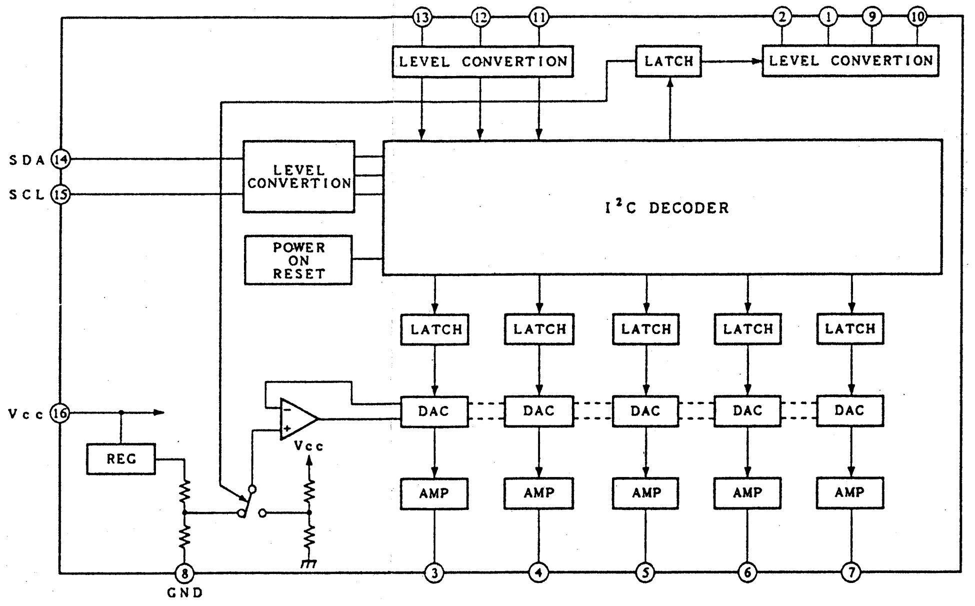
UT (1/2) BOARD IC8 TA8184F


Vcc
L IN
L OUT
TRE
BASS
CH 1 BASS/TREBLE
CH 1 VOLUME/BALANCE
CONTROL, BIAS, REF VOLTAGE
CH 2 BASS/TREBLE
CH 2 VOLUME/BALANCE
GND
R IN
R OUT
BAL
VOL
LOUD
REF

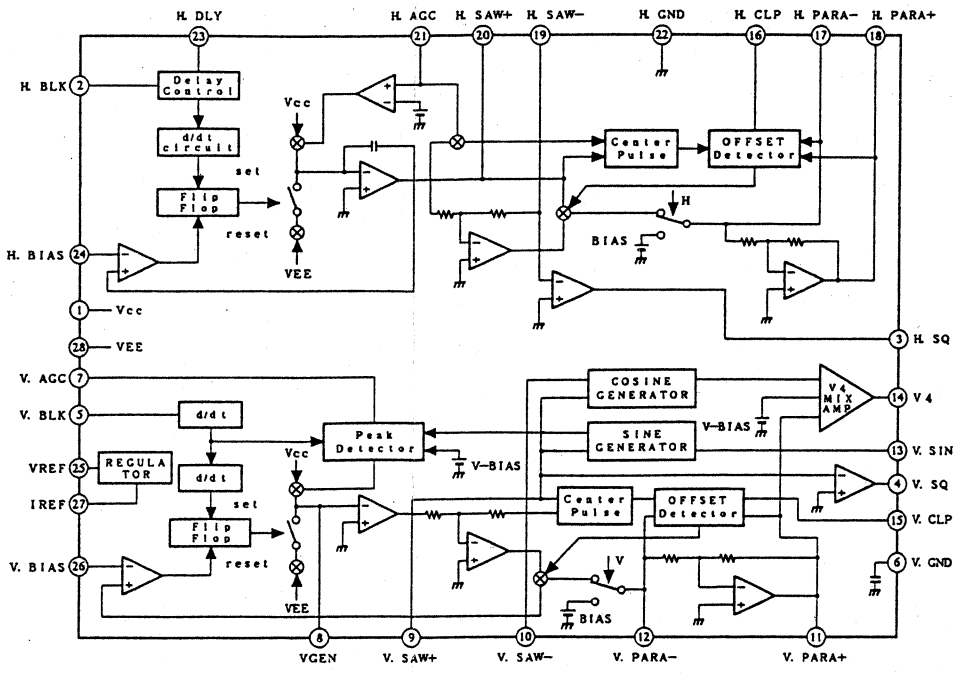
UT (2/2) BOARD IC401 LA7856

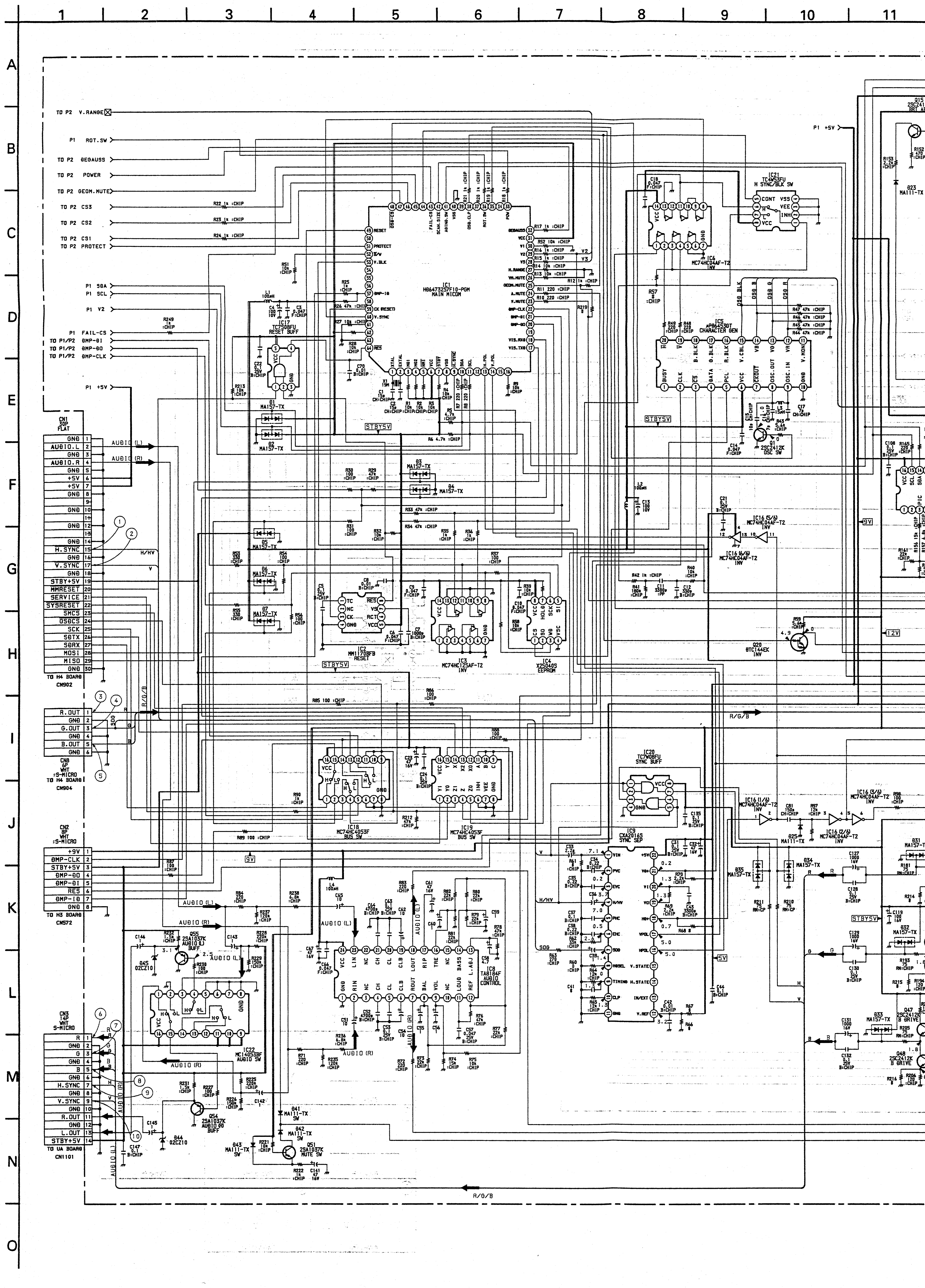

Vcc
V IN
V OSC
V RAMP
V. D
Vert. Osc.
Vert. Ramp. Generator
V OUT
GND
H IN
Phase Shifter
Saw Tooth Generator
AFC
Hor. Osc.
Xray Protector
H. S1
H. S2
AFC
SAW
AFC
AFC
H OSC
H OSC
Vcc
DUTY
HD
PROT

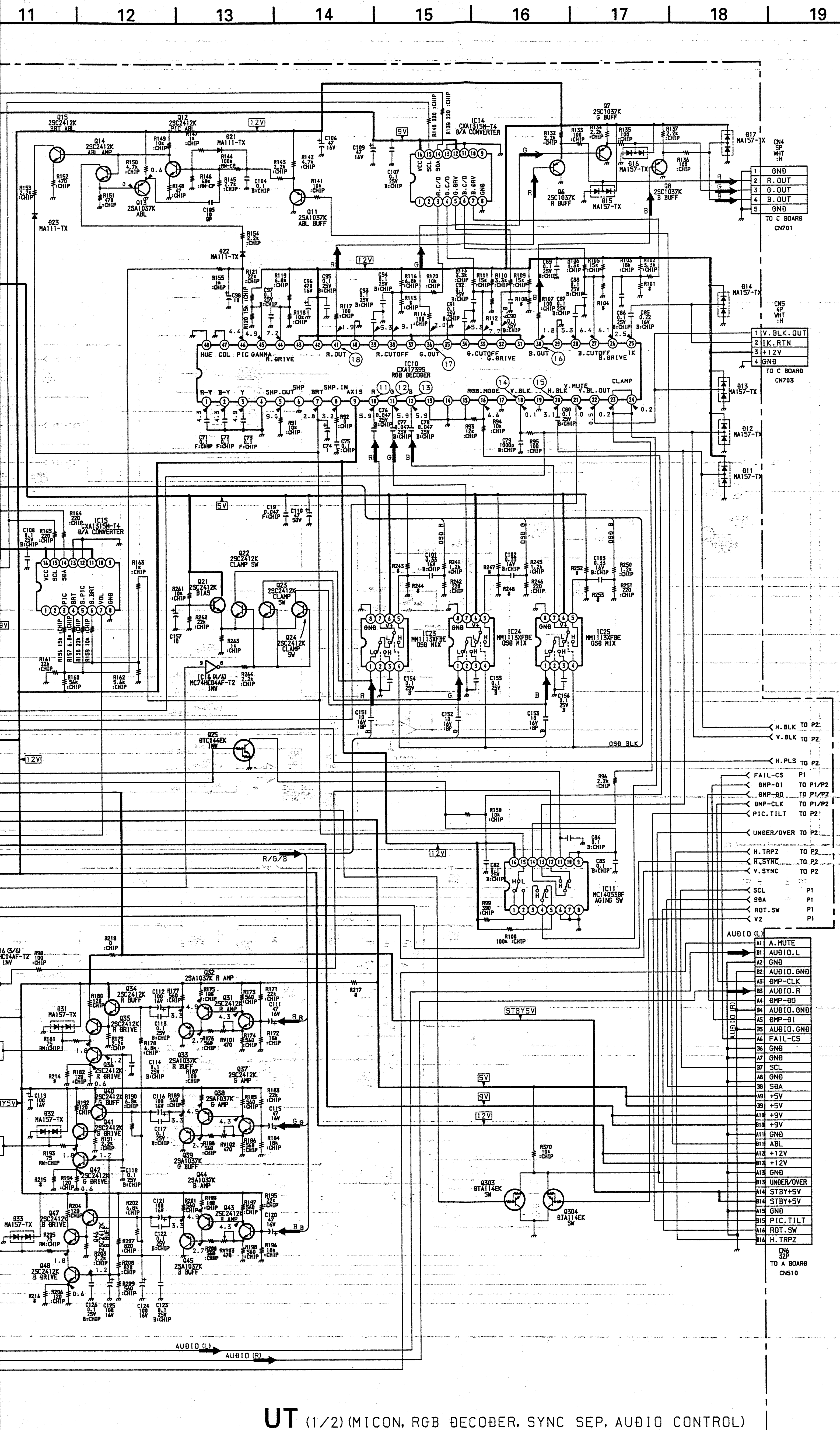
UT (1/2) BOARD IC14, IC15 CXA1315M


LEVEL CONVERTION
LATCH
LEVEL CONVERTION
SDA
SCL
LEVEL CONVERTION
I²C DECODER
POWER ON RESET
LATCH
DAC
AMP
Vcc
REG
GND

UT (2/2) BOARD IC301 CXA1470AM-T6

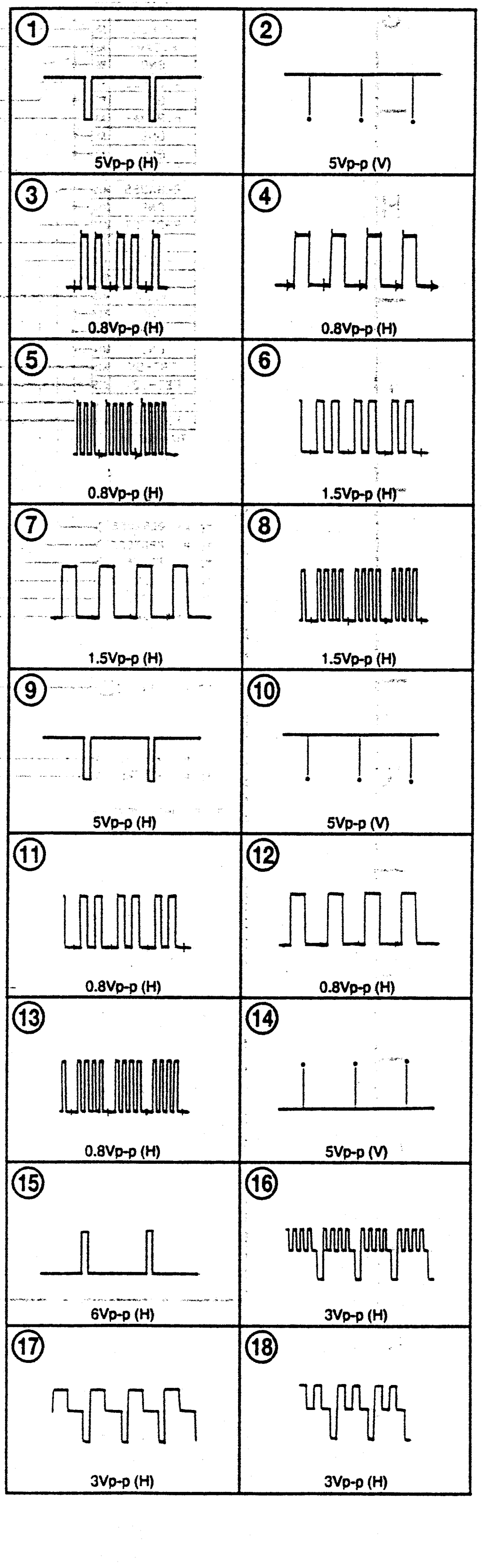

H. DLY
H. AGC
H. SAW+
H. SAW–
H. GND
H. CLP
H. PARA–
H. PARA+
H. BLK
Delay Control
d/dt circuit
set
Flip Flop
reset
Vcc
VEE
Center Pulse
OFFSET Detector
BIAS
H. BIAS
Vcc
VEE
H. SQ
V. AGC
V. BLK
VREF
IREF
V. BIAS
d/dt
REGULATOR
Peak Detector
V–BIAS
COSINE GENERATOR
SINE GENERATOR
V4 MIX AMP
V 4
V. SIN
V. SQ
V. CLP
V. GND
Center Pulse
OFFSET Detector
VGEN
V. SAW+
V. SAW–
V. PARA–
V. PARA+


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
TO P2 V.RANGE
P1 ROT.SW
TO P2 DEGAUSS
TO P2 POWER
TO P2 GEOM.MUTE
TO P2 CS3
TO P2 CS2
TO P2 CS1
TO P2 PROTECT
P1 SDA
P1 SCL
P1 V2
P1 FAIL-CS
TO P1/P2 DMP-DI
TO P1/P2 DMP-DO
TO P1/P2 DMP-CLK
P1 +5V
CN1 30P FLAT
GND
AUDIO.L
AUDIO.R
+5V
H.SYNC
V.SYNC
STBY+5V
MMRESET
SERVICE
SYSRESET
SMCS
OSDCS
SCK
SDTX
SDRX
MOSI
MISO
TO H4 BOARD CN902
R.OUT
G.OUT
B.OUT
CN8 6P WHT S-MICRO TO H4 BOARD CN904
CN2 8P WHT S-MICRO
+9V
DMP-CLK
DMP-DO
DMP-DI
RES
DMP-IO
TO H3 BOARD CN572
CN3 14P WHT S-MICRO
R
G
B
L.OUT
TO UA BOARD CN1101
IC1 HD6473257F10-PGM MAIN MICOM
RESET
PROTECT
E/W
V.BLK
CK (RESET)
V.SYNC
RES
OSD-CS
FAIL-CS
SCAN.SIZE
AGING.SW
VSS
OSD.CLP
ROT.SW
POW
DEGAUSS
VCC
V1
V2
V3
H.RANGE
VM.MUTE
GEOM.MUTE
A.MUTE
V.MUTE
DMP-CLK
DMP-DI
DMP-DO
VIS.RXD
VIS.TXD
XTAL
EXTAL
MD1
MD2
NMI
STBY
H.SYNC
SDA
SCL
H.POL
V.POL
IC17 TC7S08FU RESET BUFF
IC21 TC4W53FU H SYNC/BLK SW
IC6 MC74HC04AF-T2 INV
IC5 µPD6453GT CHARACTER GEN
Q1 2SC2412K OSC SW
STBY5V
IC2 MM1170BFB RESET
IC3 MC74HC125AF-T2 INV
IC4 X25040S EEPROM
Q20 DTC144EK INV
IC16 (5/6) MC74HC04AF-T2 INV
IC16 (6/6) MC74HC04AF-T2 INV
IC18 MC74HC4053F BUS SW
IC19 MC74HC4053F BUS SW
IC20 TC7W08FU SYNC BUFF
IC9 CXA2016S SYNC SEP
IC16 (1/6) MC74HC04AF-T2 INV
IC16 (2/6) MC74HC04AF-T2 INV
IC16 (3/6) MC74HC04AF-T2 INV
IC8 TA8184F AUDIO CONTROL
IC22 MC14053BF AUDIO SW
Q55 2SA1037K AUDIO (L) BUFF
Q54 2SA1037K AUDIO (R) BUFF
Q51 2SA1037K MUTE SW
D41 MA111-TX SW
D42 MA111-TX SW
D43 MA111-TX SW
D44 02CZ10
D45 02CZ10
D1 MA157-TX
D2 MA157-TX
D3 MA157-TX
D4 MA157-TX
D5 MA157-TX
D6 MA157-TX
D7 MA157-TX
D34 MA157-TX
D35 MA157-TX
Q47 2SC2412K G DRIVE
Q48 2SC2412K B DRIVE
AUDIO (L)
AUDIO (R)
H/HV
R/G/B
SOG
9V
5V
12V


11
12
13
14
15
16
17
18
19
IC10 CXA1739S RGB DECODER
IC14 CXA1315M-T4 D/A CONVERTER
IC15 CXA1315M-T4 D/A CONVERTER
IC11 MC14053BF AGING SW
IC23 MM1113XFBE OSD MIX
IC24 MM1113XFBE OSD MIX
IC25 MM1113XFBE OSD MIX
CN4 5P WHT :H
TO C BOARD CN701
CN5 4P WHT :H
TO C BOARD CN703
CN6 32P
TO A BOARD CN510
R.OUT
G.OUT
B.OUT
V.BLK.OUT
IK.RTN
+12V
GND
H.BLK TO P2
V.BLK TO P2
H.PLS TO P2
FAIL-CS P1
DMP-DI TO P1/P2
DMP-DO TO P1/P2
DMP-CLK TO P1/P2
PIC.TILT TO P2
UNDER/OVER TO P2
H.TRPZ TO P2
H.SYNC TO P2
V.SYNC TO P2
SCL P1
SDA P1
ROT.SW P1
V2 P1
AUDIO (L)
AUDIO (R)
A.MUTE
AUDIO.L
AUDIO.GND
DMP-CLK
AUDIO.R
DMP-DO
DMP-DI
FAIL-CS
SCL
SDA
+5V
+9V
ABL
+12V
UNDER/OVER
STBY+5V
PIC.TILT
ROT.SW
H.TRPZ
STBY5V
5V
9V
12V
R/G/B
OSD BLK
8-599532<U/C>-UT.-P1

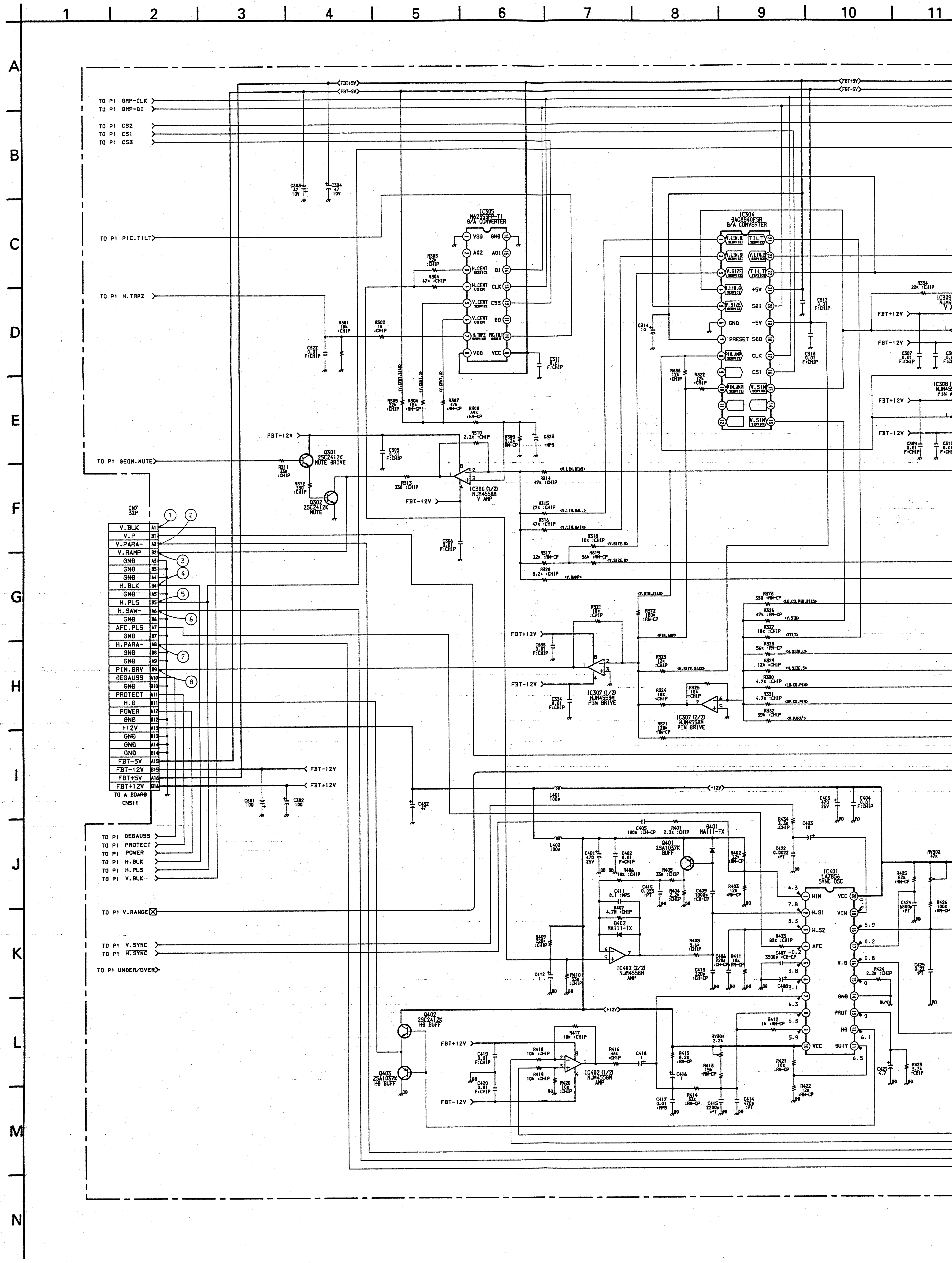
UT (1/2) (MICON, RGB DECODER, SYNC SEP, AUDIO CONTROL)

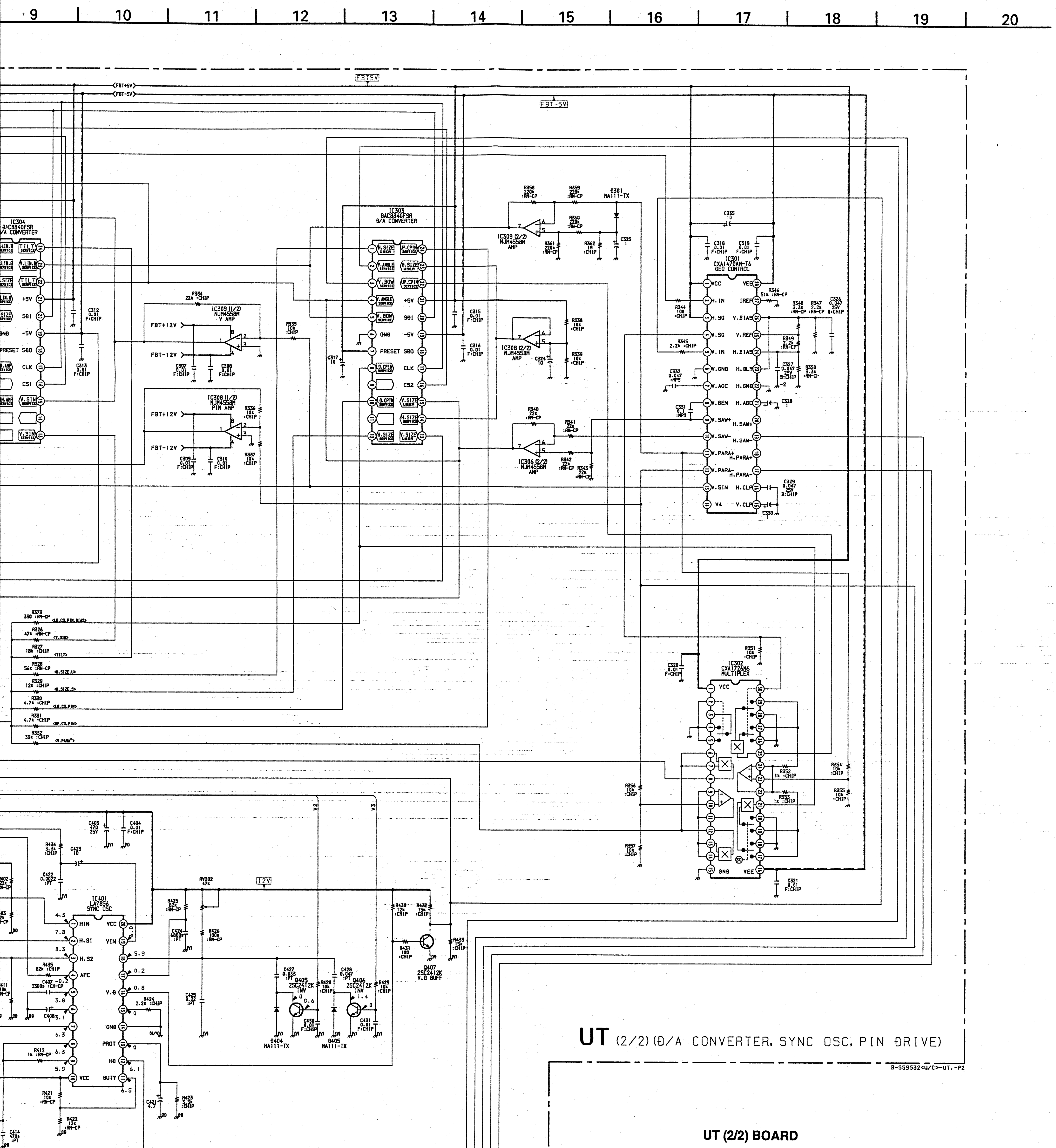
UT (1/2) BOARD



Schematic diagram
← **UT(1/2) board**

Schematic diagram
UT(2/2) board →

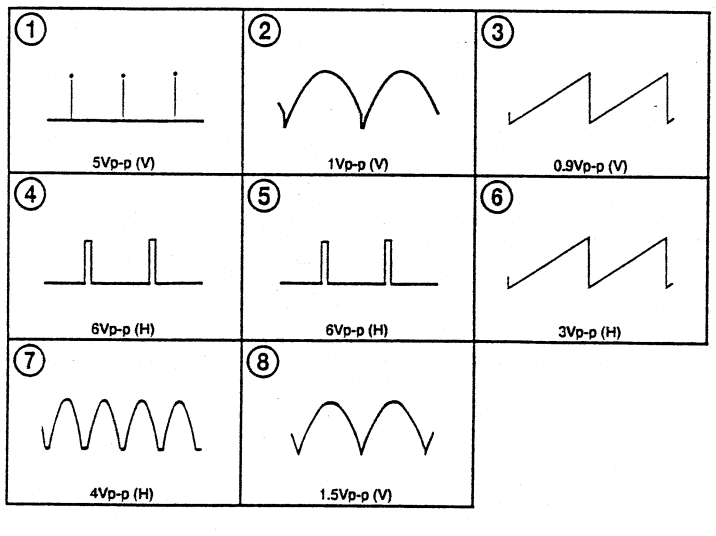

1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
TO P1 DMP-CLK
TO P1 DMP-DI
TO P1 CS2
TO P1 CS1
TO P1 CS3
TO P1 PIC.TILT
TO P1 H.TRPZ
TO P1 GEOM.MUTE
FBT+5V
FBT-5V
IC305
M62353FP-T1
D/A CONVERTER
IC304
DAC8840FSR
D/A CONVERTER
Q301
2SC2412K
MUTE DRIVE
Q302
2SC2412K
MUTE
IC306 (1/2)
NJM4558M
V AMP
FBT+12V
FBT-12V
CN7
32P
V.BLK
V.P
V.PARA-
V.RAMP
GND
H.BLK
H.PLS
H.SAW-
AFC.PLS
H.PARA-
PIN.DRV
DEGAUSS
PROTECT
H.D
POWER
+12V
FBT-5V
FBT-12V
FBT+5V
FBT+12V
TO A BOARD
CN511
IC307 (1/2)
NJM4558M
PIN DRIVE
IC307 (2/2)
NJM4558M
PIN DRIVE
TO P1 DEGAUSS
TO P1 PROTECT
TO P1 POWER
TO P1 H.BLK
TO P1 H.PLS
TO P1 V.BLK
TO P1 V.RANGE
TO P1 V.SYNC
TO P1 H.SYNC
TO P1 UNDER/OVER
Q401
2SA1037K
BUFF
D401
MA111-TX
D402
MA111-TX
IC401
LA7856
SYNC OSC
HIN
H.S1
H.S2
AFC
VCC
VIN
V.D
GND
PROT
HD
DUTY
IC402 (2/2)
NJM4558M
AMP
IC402 (1/2)
NJM4558M
AMP
Q402
2SC2412K
HD BUFF
Q403
2SA1037K
HD BUFF
RV301
RV302
L401
L402

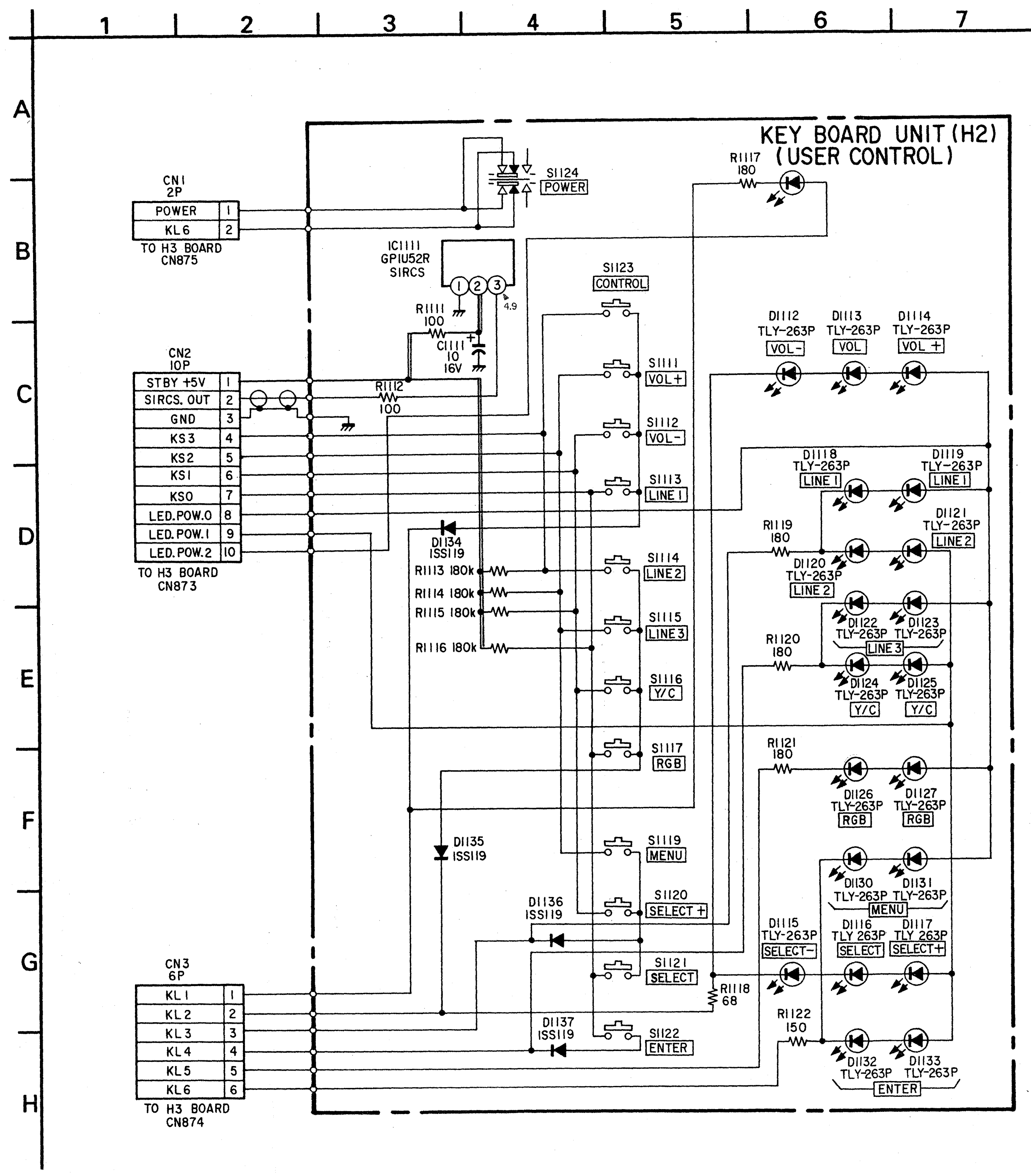

9
10
11
12
13
14
15
16
17
18
19
20
FBT+5V
FBT-5V
IC304
D/A CONVERTER
IC303
BAC8840FSR
D/A CONVERTER
IC309 (1/2)
NJM4558M
V AMP
IC308 (1/2)
NJM4558M
PIN AMP
IC309 (2/2)
NJM4558M
AMP
IC308 (2/2)
NJM4558M
AMP
IC306 (2/2)
NJM4558M
AMP
D301
MA111-TX
IC301
CXA1470AM-T6
GEO CONTROL
IC302
CXA1726M6
MULTIPLEX
IC401
LA7856
SYNC OSC
Q405
2SC2412K
INV
Q406
2SC2412K
INV
Q407
2SC2412K
V.D BUFF
D404
MA111-TX
D405
MA111-TX
RV302
47k
12V
FBT+12V
FBT-12V
V2
V3

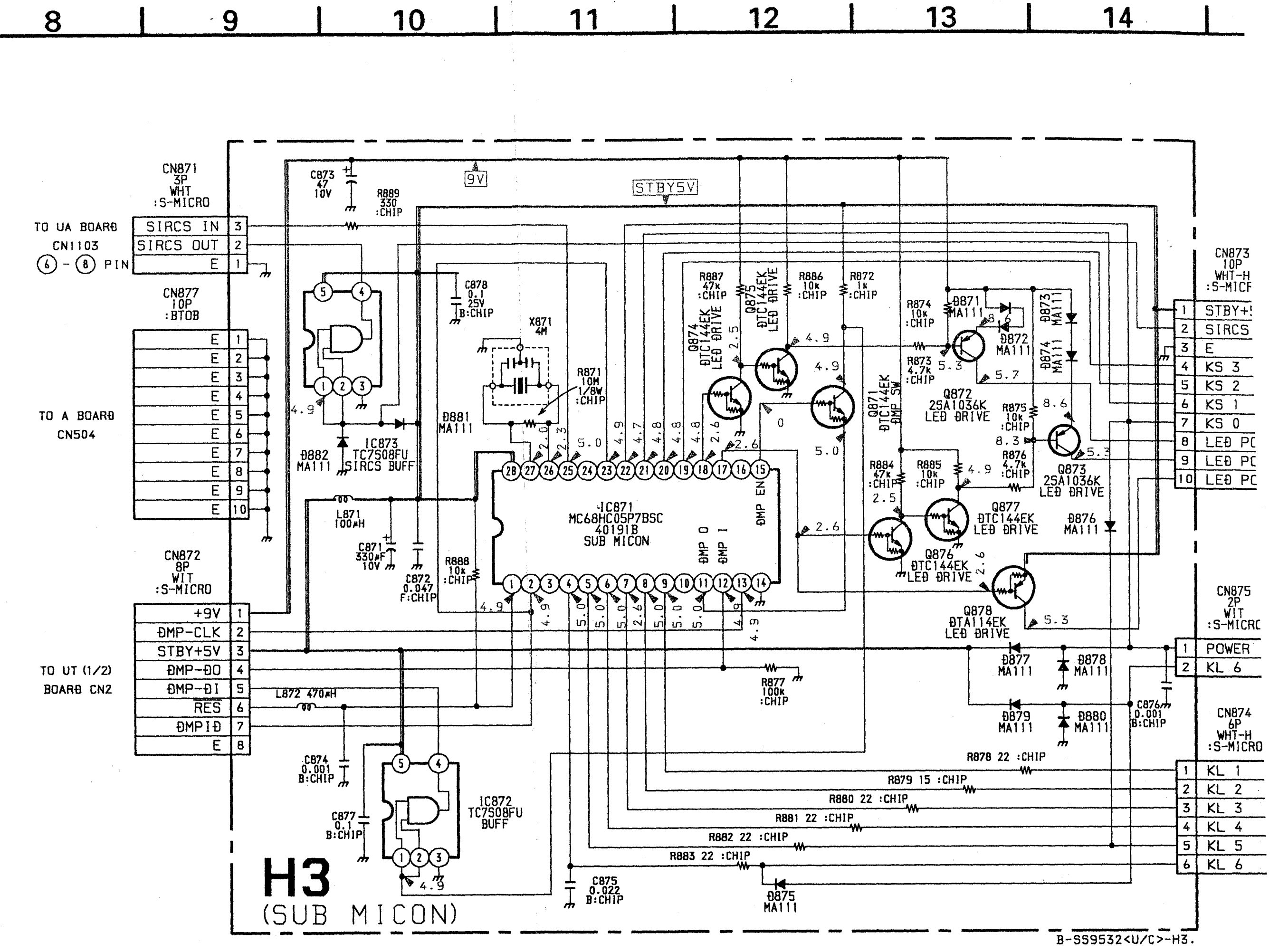
UT (2/2) (D/A CONVERTER, SYNC OSC, PIN DRIVE)

B-SS9532<U/C>-UT.-P2

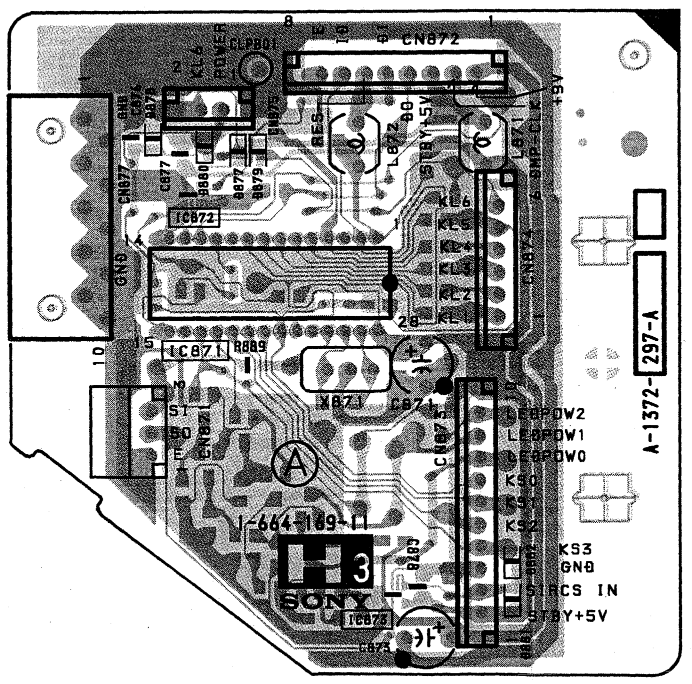
UT (2/2) BOARD



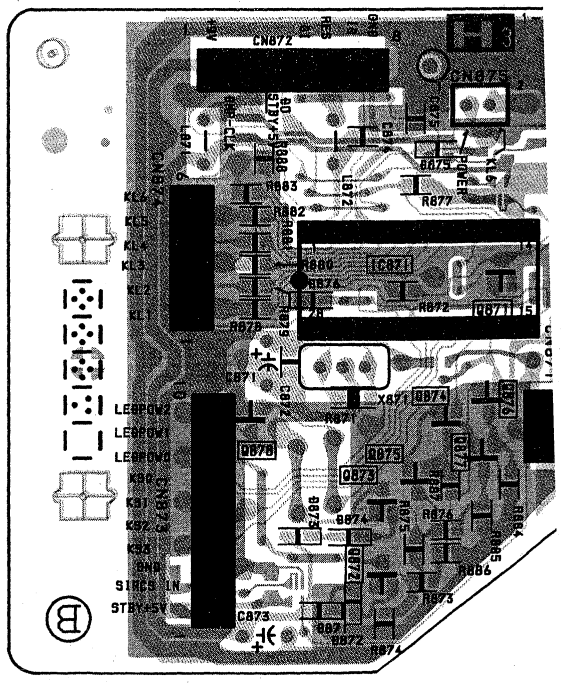

KEY BOARD UNIT (H2)
(USER CONTROL)
CN1 2P
POWER
KL6
TO H3 BOARD CN875
CN2 10P
STBY +5V
SIRCS. OUT
GND
KS3
KS2
KS1
KS0
LED.POW.0
LED.POW.1
LED.POW.2
TO H3 BOARD CN873
CN3 6P
KL1
KL2
KL3
KL4
KL5
KL6
TO H3 BOARD CN874
S1124 POWER
IC1111 GP1U52R SIRCS
R1117 180
S1123 CONTROL
S1111 VOL+
S1112 VOL−
S1113 LINE1
S1114 LINE2
S1115 LINE3
S1116 Y/C
S1117 RGB
S1119 MENU
S1120 SELECT+
S1121 SELECT
S1122 ENTER
D1112 TLY-263P VOL−
D1113 TLY-263P VOL
D1114 TLY-263P VOL+
D1118 TLY-263P LINE1
D1119 TLY-263P LINE1
D1120 TLY-263P LINE2
D1121 TLY-263P LINE2
D1122 D1123 TLY-263P LINE3
D1124 D1125 TLY-263P Y/C
D1126 D1127 TLY-263P RGB
D1130 D1131 TLY-263P MENU
D1115 TLY-263P SELECT−
D1116 TLY 263P SELECT
D1117 TLY 263P SELECT+
D1132 D1133 TLY-263P ENTER
D1134 1SS119
D1135 1SS119
D1136 1SS119
D1137 1SS119
R1111 100
C1111 10 16V
R1112 100
R1113 180k
R1114 180k
R1115 180k
R1116 180k
R1118 68
R1119 180
R1120 180
R1121 180
R1122 150

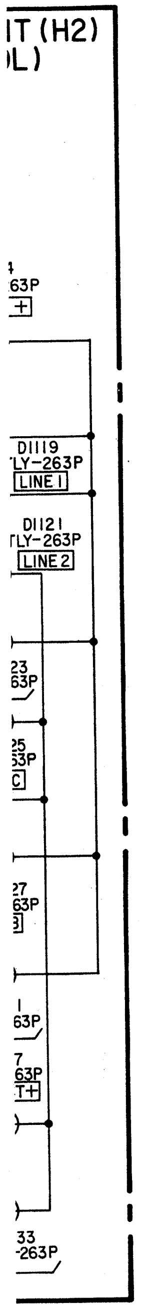

H3
(SUB MICON)
CN871 3P WHT :S-MICRO
SIRCS IN
SIRCS OUT
E
TO UA BOARD CN1103 ⑥-⑧ PIN
CN877 10P :BTOB
TO A BOARD CN504
CN872 8P WIT :S-MICRO
+9V
DMP-CLK
STBY+5V
DMP-DO
DMP-DI
RES
DMPID
TO UT (1/2) BOARD CN2
IC871 MC68HC05P7BSC 40191B SUB MICON
IC873 TC7S08FU SIRCS BUFF
IC872 TC7S08FU BUFF
X871 4M
Q871 DTC144EK LED DRIVE
Q872 2SA1036K LED DRIVE
Q873 2SA1036K LED DRIVE
Q874 DTC144EK LED DRIVE
Q876 DTC144EK LED DRIVE
Q877 DTC144EK LED DRIVE
Q878 DTA114EK LED DRIVE
CN873 10P WHT-H :S-MICRO
STBY+5
SIRCS
E
KS 3
KS 2
KS 1
KS 0
LED PC
CN875 2P WIT :S-MICRO
POWER
KL 6
CN874 6P WHT-H :S-MICRO
KL 1
KL 2
KL 3
KL 4
KL 5
KL 6
9V
STBY5V
B-SS9532<U/C>-H3.

– H3 BOARD – <Component Side>

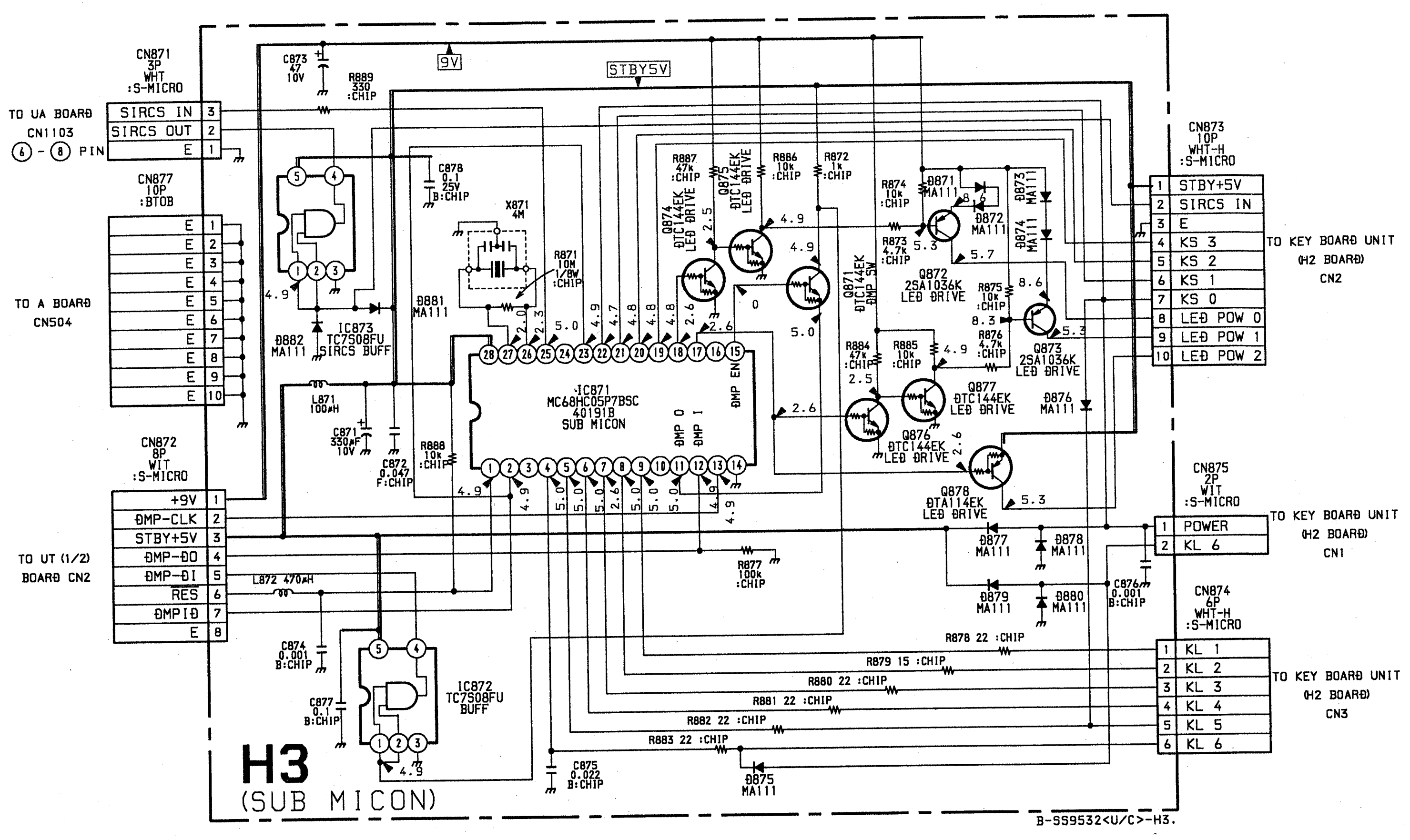

CN872
CN877
CN874
IC872
IC871
IC873
X871
1-664-169-11
A-1372-297-A
H3
SONY
LEDPOW2
LEDPOW1
LEDPOW0
KS3
GND
SIRCS IN
STBY+5V

<Conductor Side>


CN872
CN873
CN875
IC871
H3
KL6
KL5
KL4
KL3
KL1
LEDPOW2
LEDPOW1
LEDPOW0
KS0
KS1
KS2
SIRCS IN
STBY+5V

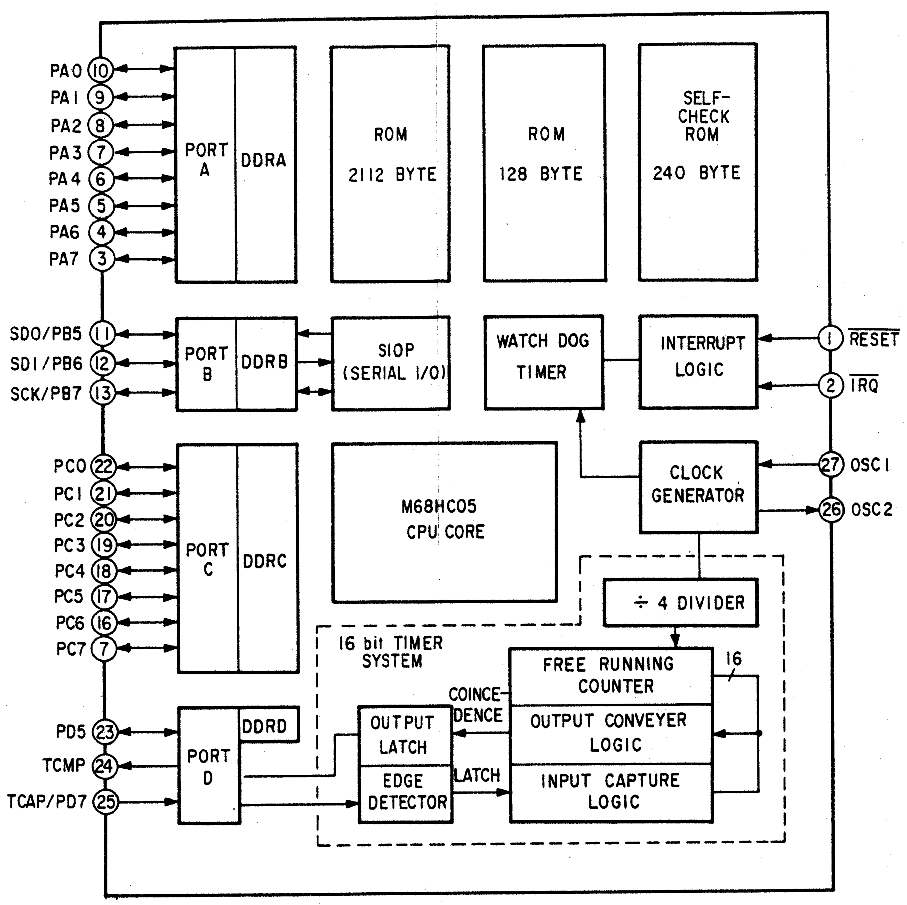


IT (H2)
L)
63P
DI119
LY-263P
LINE1
DI121
LY-263P
LINE2
23
63P
25
33P
27
63P
63P
63P
33
263P



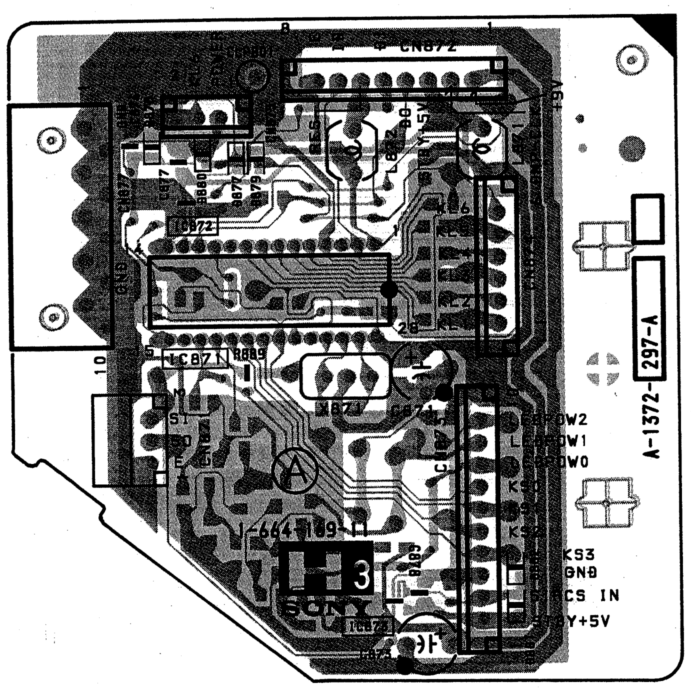
CN871 3P WHT :S-MICRO
TO UA BOARD CN1103 ⑥-⑧ PIN
SIRCS IN
SIRCS OUT
E
CN877 10P :BTOB
TO A BOARD CN504
CN872 8P WIT :S-MICRO
TO UT (1/2) BOARD CN2
+9V
DMP-CLK
STBY+5V
DMP-DO
DMP-DI
RES
DMPID
9V
STBY5V
C873 47 10V
R889 330 :CHIP
IC873 TC7S08FU SIRCS BUFF
D882 MA111
D881 MA111
X871 4M
R871 10M 1/8W :CHIP
C878 0.1 25V B:CHIP
IC871 MC68HC05P7BSC 4019IB SUB MICON
L871 100μH
C871 330μF 10V
C872 0.047 F:CHIP
R888 10k :CHIP
L872 470μH
C874 0.001 B:CHIP
C877 0.1 B:CHIP
IC872 TC7S08FU BUFF
C875 0.022 B:CHIP
D875 MA111
Q874 DTC144EK LED DRIVE
Q875 DTC144EK LED DRIVE
R887 47k :CHIP
R886 10k :CHIP
R872 1k :CHIP
Q871 DTC144EK DMP SW
R874 10k :CHIP
D871 MA111
D872 MA111
D873 MA111
D874 MA111
R873 4.7k :CHIP
Q872 2SA1036K LED DRIVE
R875 10k :CHIP
R876 4.7k :CHIP
Q873 2SA1036K LED DRIVE
R884 47k :CHIP
R885 10k :CHIP
Q877 DTC144EK LED DRIVE
Q876 DTC144EK LED DRIVE
D876 MA111
Q878 DTA114EK LED DRIVE
D877 MA111
D878 MA111
D879 MA111
D880 MA111
C876 0.001 B:CHIP
R877 100k :CHIP
R878 22 :CHIP
R879 15 :CHIP
R880 22 :CHIP
R881 22 :CHIP
R882 22 :CHIP
R883 22 :CHIP
CN873 10P WHT-H :S-MICRO
STBY+5V
SIRCS IN
E
KS 3
KS 2
KS 1
KS 0
LED POW 0
LED POW 1
LED POW 2
TO KEY BOARD UNIT (H2 BOARD) CN2
CN875 2P WIT :S-MICRO
POWER
KL 6
TO KEY BOARD UNIT (H2 BOARD) CN1
CN874 6P WHT-H :S-MICRO
KL 1
KL 2
KL 3
KL 4
KL 5
KL 6
TO KEY BOARD UNIT (H2 BOARD) CN3
DMP O
DMP 1
DMP ID
H3
(SUB MICON)
B-559532<U/C>-H3.

H3 BOARD IC871 MC68HC05P7B



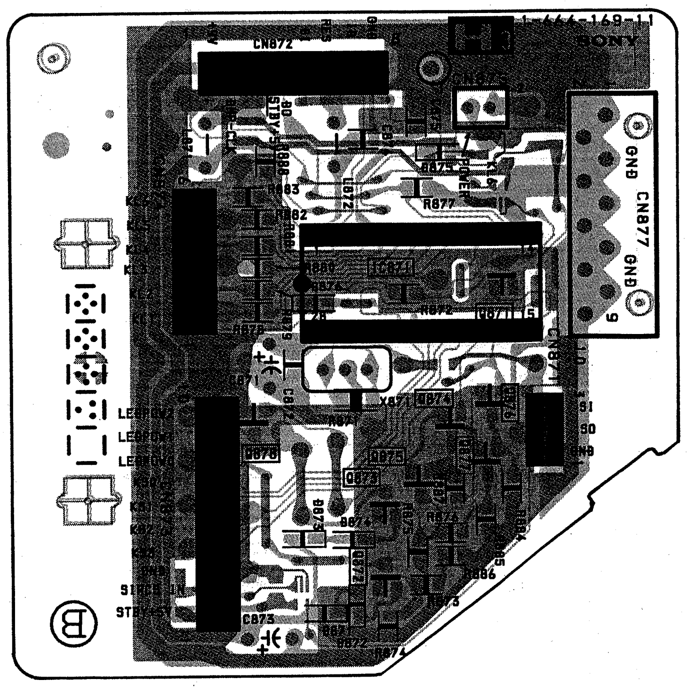
PA0 ⑩
PA1 ⑨
PA2 ⑧
PA3 ⑦
PA4 ⑥
PA5 ⑤
PA6 ④
PA7 ③
PORT A
DDRA
ROM 2112 BYTE
ROM 128 BYTE
SELF-CHECK ROM 240 BYTE
SDO/PB5 ⑪
SDI/PB6 ⑫
SCK/PB7 ⑬
PORT B
DDRB
SIOP (SERIAL I/O)
WATCH DOG TIMER
INTERRUPT LOGIC
① RESET
② IRQ
PC0 ㉒
PC1 ㉑
PC2 ⑳
PC3 ⑲
PC4 ⑱
PC5 ⑰
PC6 ⑯
PC7 ⑦
PORT C
DDRC
M68HC05 CPU CORE
CLOCK GENERATOR
㉗ OSC1
㉖ OSC2
÷ 4 DIVIDER
16 bit TIMER SYSTEM
FREE RUNNING COUNTER
16
COINCIDENCE
OUTPUT LATCH
OUTPUT CONVEYER LOGIC
LATCH
EDGE DETECTOR
INPUT CAPTURE LOGIC
PD5 ㉓
TCMP ㉔
TCAP/PD7 ㉕
PORT D
DDRD

– H3 BOARD – <Component Side>



CN872
IC872
IC871
IC873
A
H3
SONY
A-1372-297-A
POW2
POW1
POW0
KS3
GND
SIRCS IN
STBY+5V

<Conductor Side>



CN872
CN877
GND
R877
X871
B
SONY

H3 [SUB MICON]

- ▨ : Pattern from the side which enables seeing.
- ■ : Pattern of the rear side.

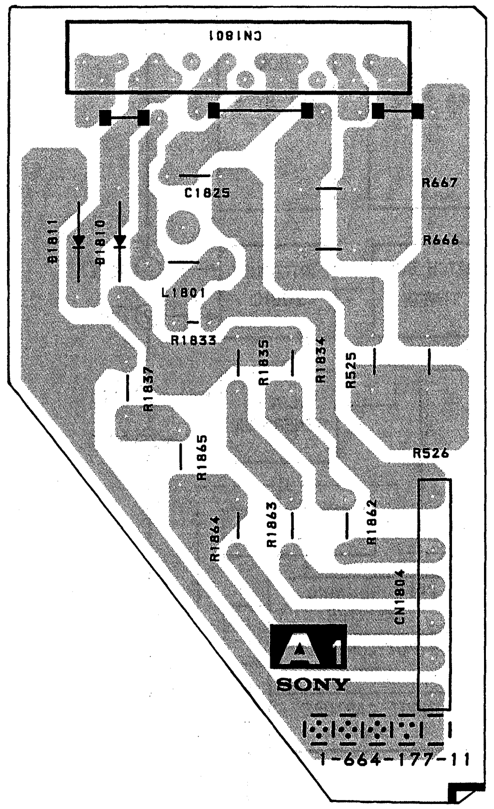
Schematic diagrams

← H2, H3 boards

A [V.OUT, H.OUT, AUDIO AMP]

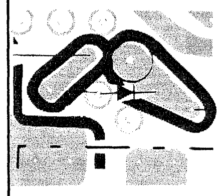
A1 [H DRIVE]

– A1 BOARD –


CN1801
C1825
R667
R666
D1811
D1810
L1801
R1833
R1835
R1834
R525
R1837
R1865
R526
R1864
R1863
R1862
CN1804
A1
SONY
1-664-177-11

A BOARD

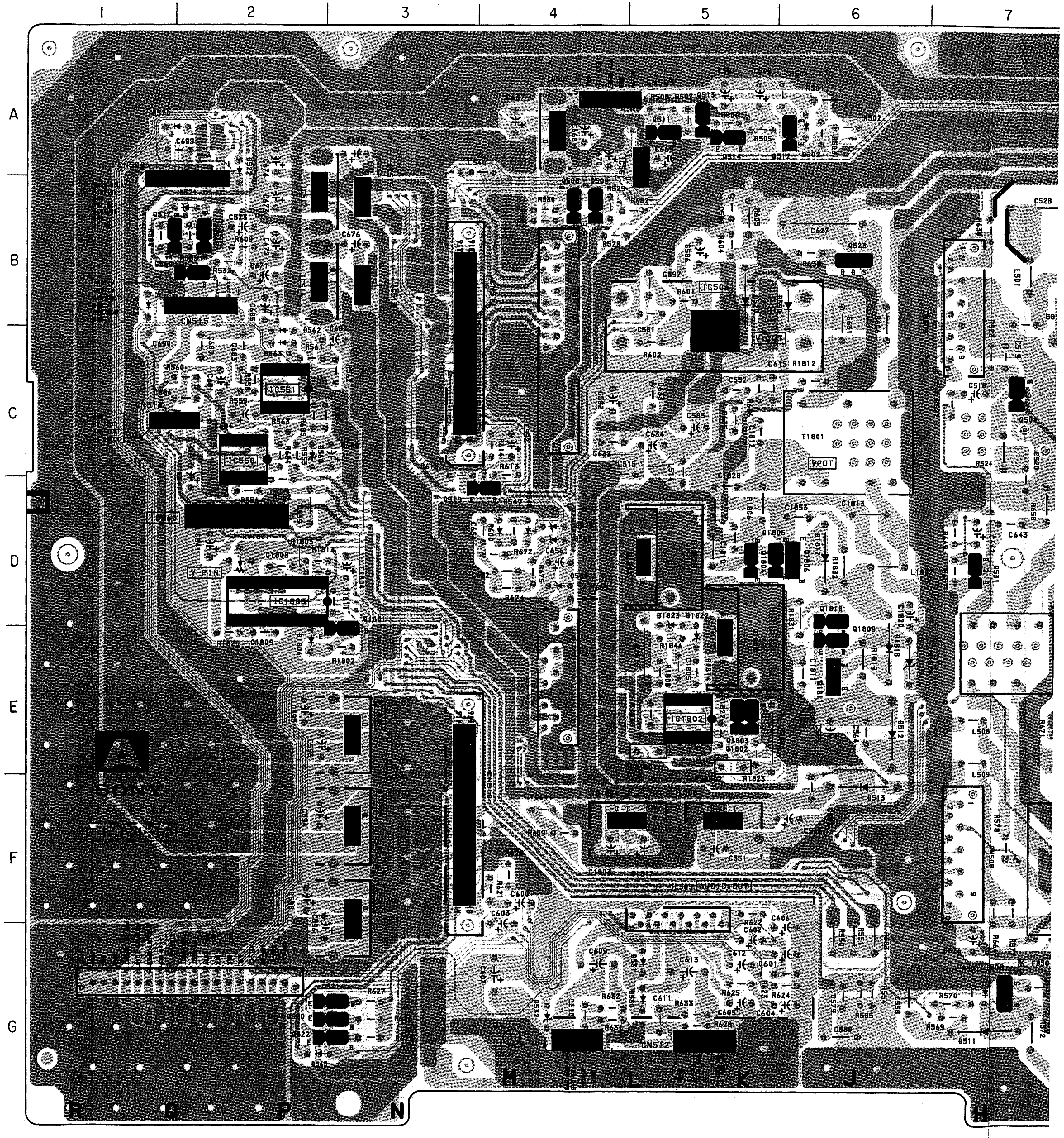
IC	
IC504	B–5
IC505	F–5
IC506	E–3
IC507	A–4
IC508	F–5
IC510	F–3
IC511	F–3
IC513	B–3
IC514	B–2
IC515	B–3
IC517	B–2
IC550	C–2
IC551	C–2
IC560	D–2
IC561	A–5
IC1802	E–5
IC1803	D–2
IC1804	F–4
TRANSISTOR	
Q504	C–7
Q505	D–10
Q506	D–12
Q508	B–4
Q509	B–4
Q510	D–8
Q511	A–5
Q512	A–6
Q513	A–5
Q514	A–5
Q516	G–7
Q517	B–1
Q518	B–2
Q519	D–3
Q520	G–2
Q521	G–2
Q522	G–2
Q523	B–6
Q531	D–7
Q532	E–8
Q560	B–2
Q1801	D–3
Q1802	E–5
Q1803	E–5
Q1804	D–5
Q1805	D–5
Q1806	D–6
Q1807	D–5
Q1808	E–5
Q1809	E–6
Q1810	D–6
Q1811	E–6
DIODE	
D501	D–11
D502	A–6
D503	D–9
D505	E–10
D509	G–7
D510	G–12
D511	G–7
D512	E–6
D513	F–6
D516	E–11
D520	B–5
D521	B–2
D522	A–2
D523	B–1
D524	B–10
D525	D–4
D530	G–5
D531	G–5
D532	G–4
D545	G–2
D546	F–9
D547	D–4
D548	D–4
D550	D–4
D560	C–2
D561	D–4
D562	C–2
D563	C–2
D564	C–12
D1806	E–2
D1817	D–6
D1818	E–6
D1822	E–5
D1824	E–6
VARIABLE RESISTOR	
RV1801	D–2



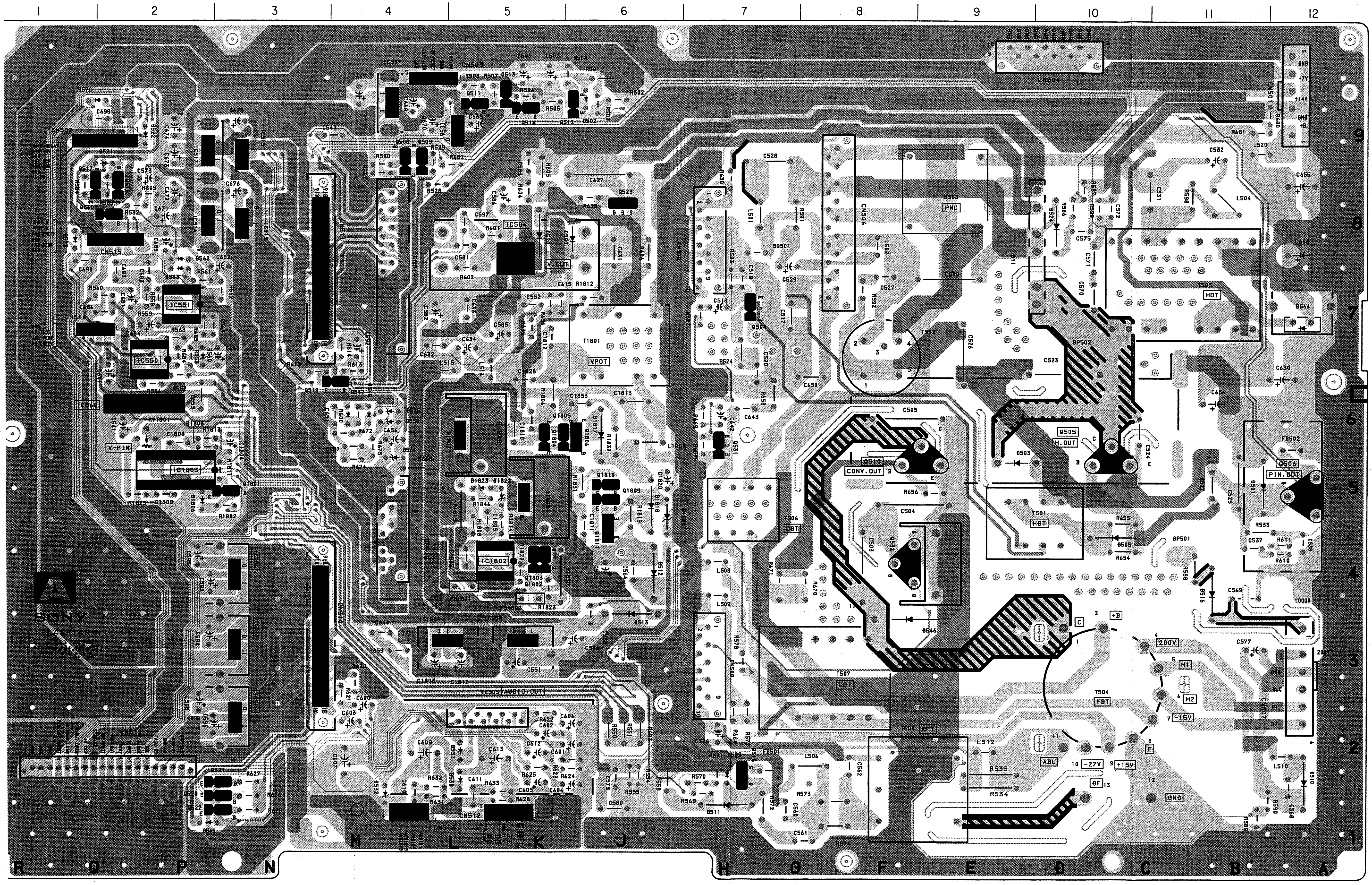
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

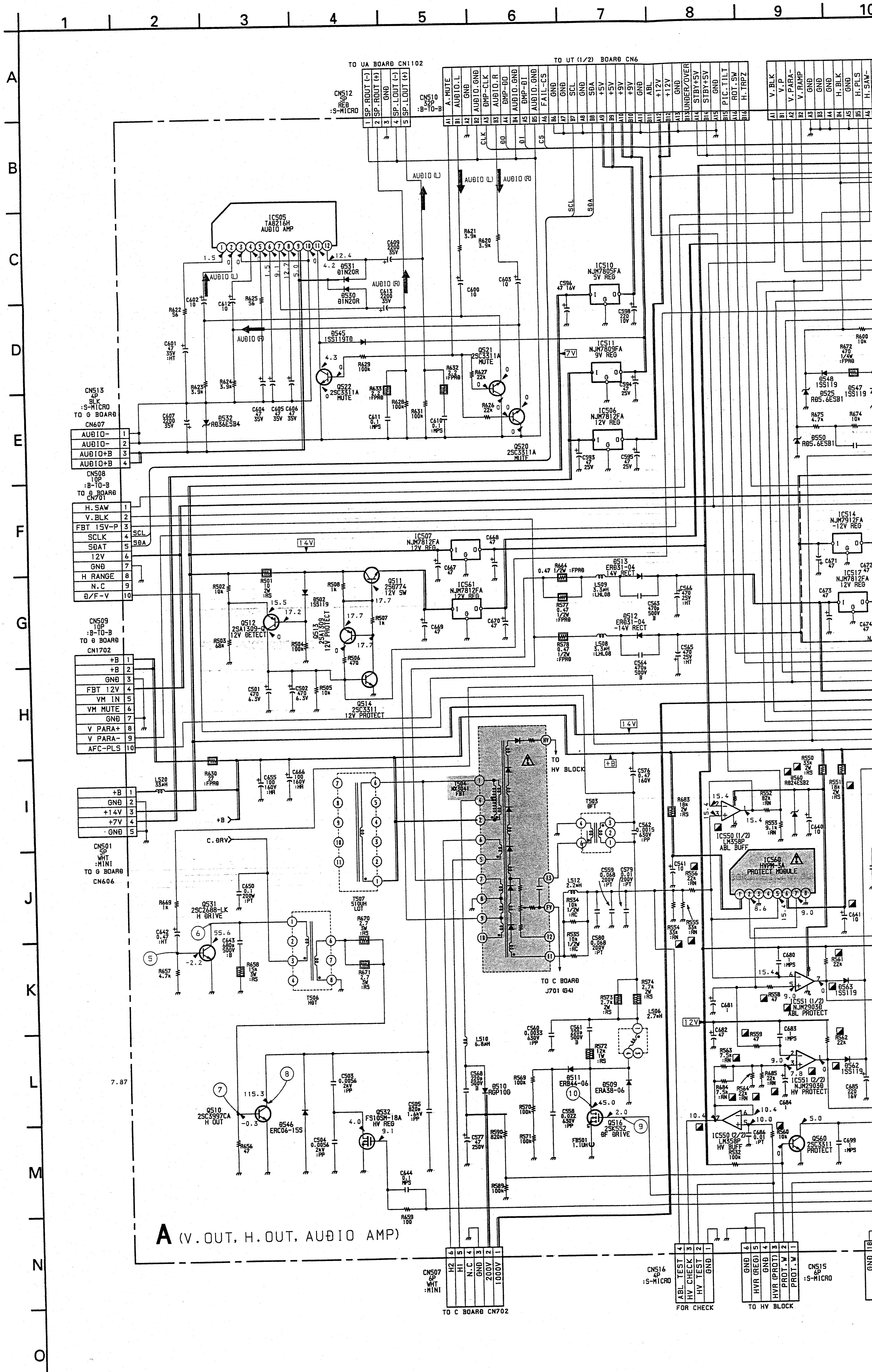
- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.

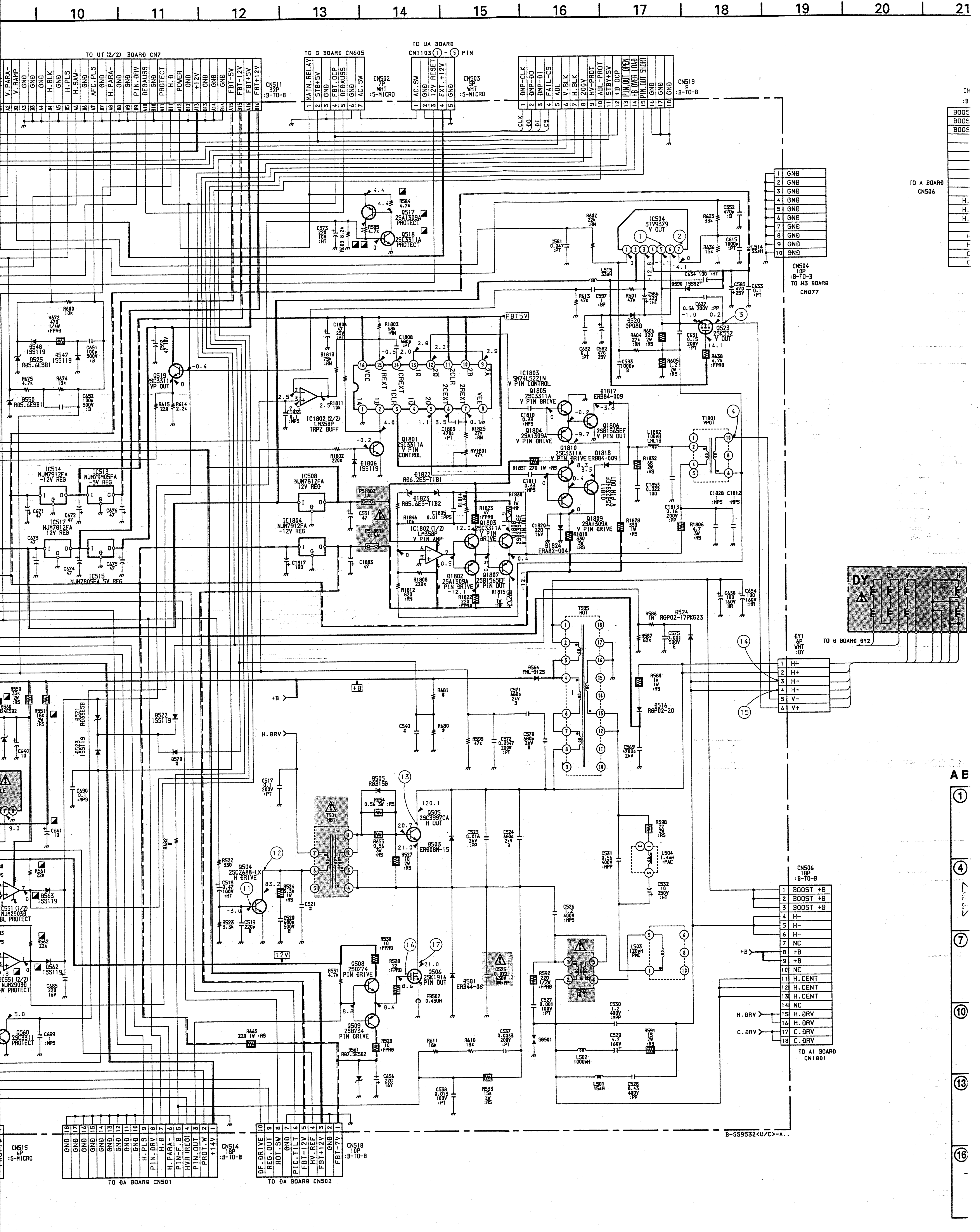
– A BOARD –

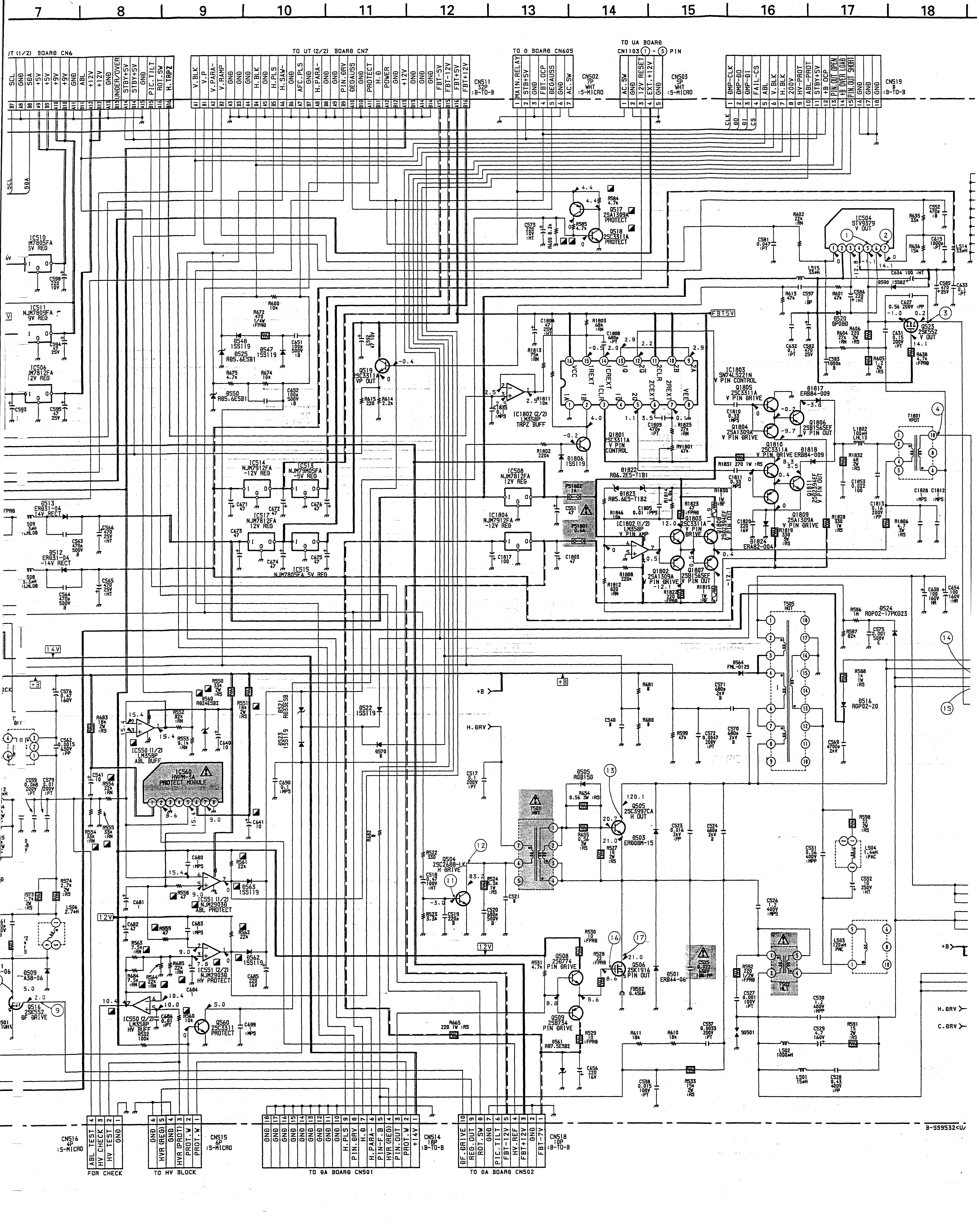

1
2
3
4
5
6
7
A
B
C
D
E
F
G
CN502
CN503
CN512
CN515
IC504
IC550
IC551
IC560
IC1802
IC1803
V.OUT
V-PIN
VPOT
T1801
L501
L508
L509
L515
Q504
Q511
Q512
Q513
Q514
Q517
Q519
Q523
Q1801
Q1802
Q1803
Q1805
Q1809
Q1810
AUDIO OUT
A
SONY
R
Q
P
N
M
L
K
J
H

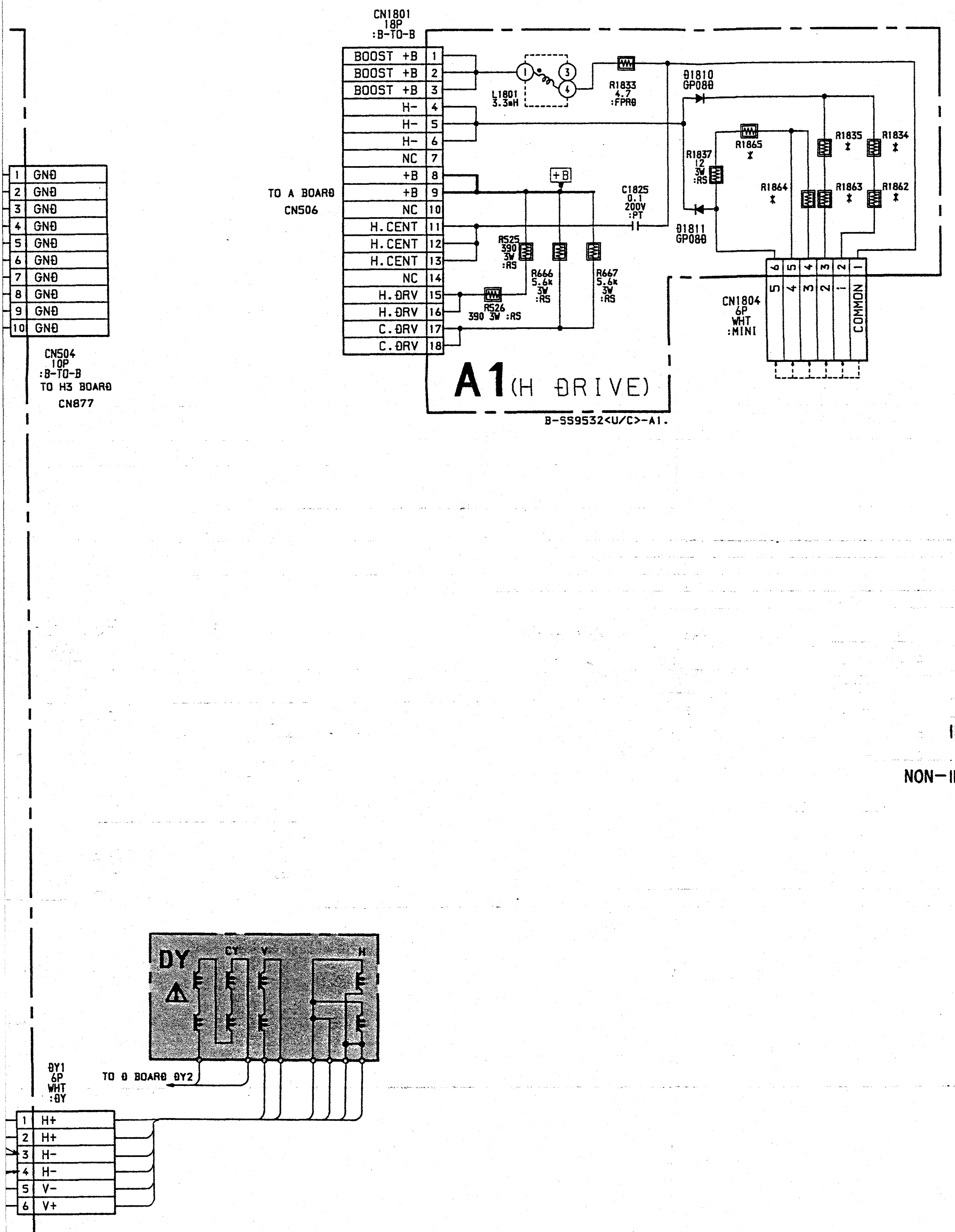
BOARD –


1
2
3
4
5
6
7
8
9
10
11
12
R
Q
P
N
M
L
K
J
H
G
F
E
D
C
B
A
SONY
CN502
CN515
CN511
IC551
IC550
IC1803
V-PIN
CN519
IC507
CN503
IC504
V.OUT
T1801
VPOT
IC1802
IC1804
IC506
AUDIO.OUT
CN512
CN513
CN504
CN501
CN506
CN505
L503
PMC
T502
Q510
CONV.OUT
Q505
H.OUT
Q506
PIN.OUT
T505
HDT
T501
HDT
T506
CDT
T507
LDT
T504
FBT
T508
BFT
BP502
BP501
FB502
ABL
+B
200V
H1
H2
-15V
-27V
+15V
GND
CN507
1000V

A (V.OUT, H.OUT, AUDIO AMP)
TO UA BOARD CN1102
CN512 5P RED :S-MICRO
SP.ROUT(-)
SP.ROUT(+)
GND
SP.LOUT(-)
SP.LOUT(+)
CN510 32P :B-TO-B
TO UT (1/2) BOARD CN6
A.MUTE
AUDIO.L
GND
AUDIO.GND
DMP-CLK
AUDIO.R
DMP-DO
DMP-DI
AUDIO.GND
FAIL-CS
SCL
SDA
+5V
+9V
ABL
+12V
UNDER/OVER
STBY+5V
PIC.TILT
ROT.SW
H.TRPZ
V.BLK
V.P
V.PARA-
V.RAMP
H.BLK
H.PLS
H.SAW-
IC505 TA8216H AUDIO AMP
AUDIO (L)
AUDIO (R)
D531 DIN20R
D530 DIN20R
D545 1SS119TD
Q522 2SC3311A MUTE
Q521 2SC3311A MUTE
Q520 2SC3311A MUTE
D532 RD36ESB4
IC510 NJM7805FA 5V REG
IC511 NJM7809FA 9V REG
IC506 NJM7812FA 12V REG
CN513 4P BLK :S-MICRO TO G BOARD CN607
AUDIO-
AUDIO-
AUDIO+B
AUDIO+B
CN508 10P :B-TO-B TO D BOARD CN701
H.SAW
V.BLK
FBT 15V-P
SCLK
SDAT
12V
GND
H RANGE
N.C
D/F-V
IC507 NJM7812FA 12V REG
IC561 NJM7812FA 12V REG
Q511 2SD774 12V SW
Q512 2SA1309-Q 12V DETECT
Q513 2SA1309 12V PROTECT
Q514 2SC3311 12V PROTECT
D502 1SS119
D513 ERD31-04 14V RECT
D512 ERD31-04 -14V RECT
IC514 NJM7912FA -12V REG
IC517 NJM7812FA 12V REG
D548 1SS119
D547 1SS119
D525 RD5.6ESB1
D550 RD5.6ESB1
CN509 10P :B-TO-B TO D BOARD CN1702
+B
+B
GND
FBT 12V
VM IN
VM MUTE
GND
V PARA+
V PARA-
AFC-PLS
CN501 5P WHT :MINI TO G BOARD CN606
+B
GND
+14V
+7V
GND
T504 NX-3041 FBT
TO HV BLOCK
T503 BFT
T507 S10UH LOT
T506 HDT
TO C BOARD J701 (G4)
Q531 2SC2688-LK H DRIVE
Q510 2SC3997CA H OUT
D546 ERC06-15S
Q532 FS10SM-18A HV REG
D510 RGP10G
D511 ERB44-06
D509 ERA38-06
Q516 2SK552 DF DRIVE
IC550 (1/2) LM358P ABL BUFF
IC550 (2/2) LM358P HV BUFF
IC560 HVPM-3A PROTECT MODULE
IC551 (1/2) NJM2903D ABL PROTECT
IC551 (2/2) NJM2903D HV PROTECT
Q560 2SC3311 PROTECT
D560 RD24ESB2
D563 1SS119
D562 1SS119
CN507 6P WHT :MINI TO C BOARD CN702
H2
H1
N.C
GND
200V
1000V
CN516 4P :S-MICRO FOR CHECK
ABL TEST
HV CHECK
HV TEST
GND
CN515 6P :S-MICRO TO HV BLOCK
GND
HVR (REG)
GND
HVR (PROT)
PROT.W
PROT.W
14V
12V
7V
+B
7.87


10
11
12
13
14
15
16
17
18
19
20
21
TO UT (2/2) BOARD CN7
V.PARA-
V.RAMP
GND
H.BLK
H.PLS
H.SAW-
AFC.PLS
H.PARA-
PIN.DRV
DEGAUSS
PROTECT
H.D
POWER
+12V
FBT-5V
FBT-12V
FBT+5V
FBT+12V
CN511 32P :B-TO-B
TO G BOARD CN605
MAIN.RELAY
STB+5V
FBT.OCP
DEGAUSS
AC.SW
CN502 7P WHT :S-MICRO
TO UA BOARD CN1103 ① - ⑤ PIN
AC.SW
12V RESET
EXT.+12V
CN503 5P WHT :S-MICRO
DMP-CLK
DMP-D0
DMP-D1
FAIL-CS
ABL
V.BLK
H.BLK
200V
HV-PROT
ABL-PROT
STBY+5V
+B OCP
PIN.OUT OPEN
+B OVER LOAD
PIN.OUT SHORT
CN519 18P :B-TO-B
TO A BOARD CN506
CN504 10P :B-TO-B
TO H3 BOARD CN877
Q517 2SA1309A PROTECT
Q518 2SC3311A PROTECT
IC504 STV9379 V OUT
Q523 2SK552 V OUT
Q520 GP08D
Q519 2SC3311A VP OUT
IC1803 SN74LS221N V PIN CONTROL
IC1802 (2/2) LM358P TRPZ BUFF
Q1801 2SC3311A V PIN CONTROL
FBT5V
Q1805 2SC3311A V PIN DRIVE
Q1804 2SA1309A V PIN DRIVE
Q1806 2SB1565EF V PIN OUT
Q1817 ERB84-009
Q1810 2SC3311A V PIN DRIVE
Q1818 ERB84-009
Q1811 2SB1565EF V PIN OUT
Q1809 2SA1309A V PIN DRIVE
Q1824 ERA82-004
T1801 VPOT
L1802 100μH LHL13
IC514 NJM7912FA -12V REG
IC513 NJM79M05FA -5V REG
IC517 NJM7812FA 12V REG
IC515 NJM7805FA 5V REG
IC508 NJM7812FA 12V REG
IC1804 NJM7912FA -12V REG
PS1802 1A
PS1801 0.6A
Q1822 RD6.2ES-T1B1
Q1823 RD5.6ES-T1B2
IC1802 (1/2) LM358P V PIN AMP
Q1803 2SC3311A V PIN DRIVE
Q1802 2SA1309A V PIN DRIVE
Q1807 2SB1565EF V PIN OUT
Q1808 2SD2394EF V PIN OUT
T505 HDT
D524 RGP02-17PKG23
D564 FML-G12S
D516 RGP02-20
DY
DY1 6P WHT :DY
TO D BOARD DY2
H+
H-
V-
V+
+B
H.DRV
D522 1SS119
D570
T501 HDT
D505 RGP15G
Q505 2SC3997CA H OUT
D503 ERD08M-15
Q504 2SC2688-LK H DRIVE
L504 1.4mH PAC
CN506 18P :B-TO-B
BOOST +B
NC
H.CENT
H.DRV
C.DRV
TO A1 BOARD CN1801
12V
Q508 2SD774 PIN DRIVE
Q509 2SB734 PIN DRIVE
Q506 2SK1916 PIN OUT
FB502 0.45UH
D501 ERB44-06
T502 HLT
L503 120μH PMC
SD501
L502 1000μH
L501 15μH
IC551 (1/2) NJM2903D BL PROTECT
IC551 (2/2) NJM2903D HV PROTECT
Q560 2SC3311 PROTECT
CN515 6P :S-MICRO
TO DA BOARD CN501
H.PLS
PIN.BRV
PIN.H.D
H.PARA-
PIN-F.B
HVR (REG)
PIN.OUT
PROT.W
+14V
CN514 18P :B-TO-B
DF.DRIVE
REG.OUT
ROT.SW
GND
PIC.TILT
FBT-12V
HV.REF
FBT+12V
FBT-7V
CN518 10P :B-TO-B
TO DA BOARD CN502
B-SS9532<U/C>-A..

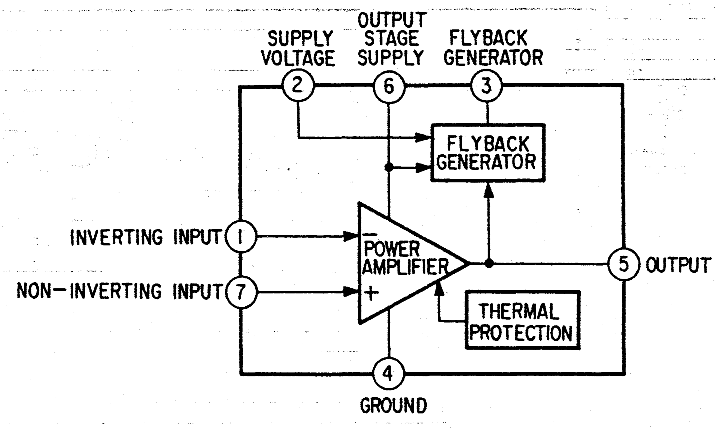

7
8
9
10
11
12
13
14
15
16
17
18
TO UT (2/2) BOARD CN7
TO G BOARD CN605
TO UA BOARD CN1103 ①-⑤ PIN
CN511 32P :B-TO-B
CN502 7P WHT :S-MICRO
CN503 5P WHT :S-MICRO
CN519 :B-TO-B
IC510 NJM7805FA 5V REG
IC511 NJM7809FA 9V REG
IC506 NJM7812FA 12V REG
IC514 NJM7912FA -12V REG
IC513 NJM79M05FA -5V REG
IC517 NJM7812FA 12V REG
IC515 NJM7805FA 5V REG
IC508 NJM7812FA 12V REG
IC1804 NJM7912FA -12V REG
IC504 STV9379 V OUT
IC1803 SN74LS221N V PIN CONTROL
IC1802 (2/2) LM358P TRPZ BUFF
IC1802 (1/2) LM358P V PIN AMP
Q517 2SA1309A PROTECT
Q518 2SC3311A PROTECT
Q519 2SC3311A VP OUT
Q520 GP08D
Q523 2SK552 V OUT
Q1801 2SC3311A V PIN CONTROL
Q1805 2SC3311A V PIN DRIVE
Q1804 2SA1309A V PIN DRIVE
Q1806 2SB1565EF V PIN OUT
Q1810 2SC3311A V PIN DRIVE
Q1811 2SD2394EF V PIN OUT
Q1809 2SA1309A V PIN DRIVE
Q1803 2SC3311A V PIN DRIVE
Q1802 2SA1309A V PIN DRIVE
Q1807 2SB1565EF V PIN OUT
T1801 VPOT
T505 HDT
T501 HDT
T502 HLT
IC560 HVPM-5A PROTECT MODULE
IC550 (1/2) LM358P ABL BUFF
IC550 (2/2) LM358P HV BUFF
IC551 (1/2) NJM2903D ABL PROTECT
IC551 (2/2) NJM2903D HV PROTECT
Q504 2SC2688-LK H DRIVE
Q505 2SC5997CA H OUT
Q506 2SK1916 S PIN OUT
Q508 2SD774 PIN DRIVE
Q509 2SB734 PIN DRIVE
Q516 2SK552 DF DRIVE
Q560 2SC3311 PROTECT
H.DRV
C.DRV
FBT5V
14V
12V
+B
B-SS9532<U/
CN516 4P :S-MICRO
FOR CHECK
CN515 6P :S-MICRO
TO HV BLOCK
CN514 18P :B-TO-B
TO DA BOARD CN501
CN518 10P :B-TO-B
TO DA BOARD CN502


CN1801
18P
:B-TO-B
BOOST +B 1
BOOST +B 2
BOOST +B 3
H- 4
H- 5
H- 6
NC 7
+B 8
+B 9
NC 10
H.CENT 11
H.CENT 12
H.CENT 13
NC 14
H.ÐRV 15
H.ÐRV 16
C.ÐRV 17
C.ÐRV 18
TO A BOARÐ
CN506
L1801
3.3mH
R1833
4.7
:FPRÐ
Ð1810
GP08Ð
Ð1811
GP08Ð
C1825
0.1
200V
:PT
+B
R525
390
3W
:RS
R526
390 3W :RS
R666
5.6k
3W
:RS
R667
5.6k
3W
:RS
R1837
12
3W
:RS
R1865
R1864
R1835
R1834
R1863
R1862
CN1804
6P
WHT
:MINI
COMMON
A1 (H ÐRIVE)
B-SS9532<U/C>-A1.
1 GNÐ
2 GNÐ
3 GNÐ
4 GNÐ
5 GNÐ
6 GNÐ
7 GNÐ
8 GNÐ
9 GNÐ
10 GNÐ
CN504
10P
:B-TO-B
TO H3 BOARÐ
CN877
DY
CY
V
H
TO Ð BOARÐ ÐY2
ÐY1
6P
WHT
:ÐY
1 H+
2 H+
3 H-
4 H-
5 V-
6 V+

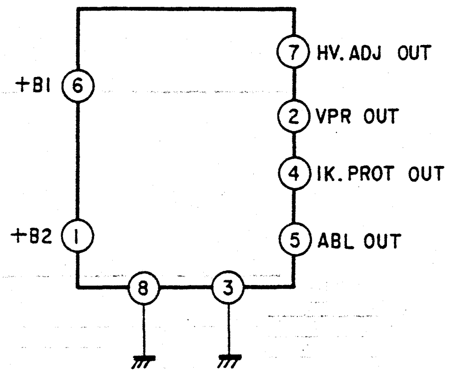
A1 BOARD * MARK LIST

	PGM-200R1E/R1U	PGM-200R1A
R1834	8.2 3W : RS	JW (7.5MM)
R1835	82 3W : RS	27 3W : RS
R1862	6.8 3W : RS	0.22 3W : RS
R1863	68 3W : RS	27 3W : RS
R1864	56 3W : RS	82 3W : RS
R1865	10 3W : RS	27 3W : RS

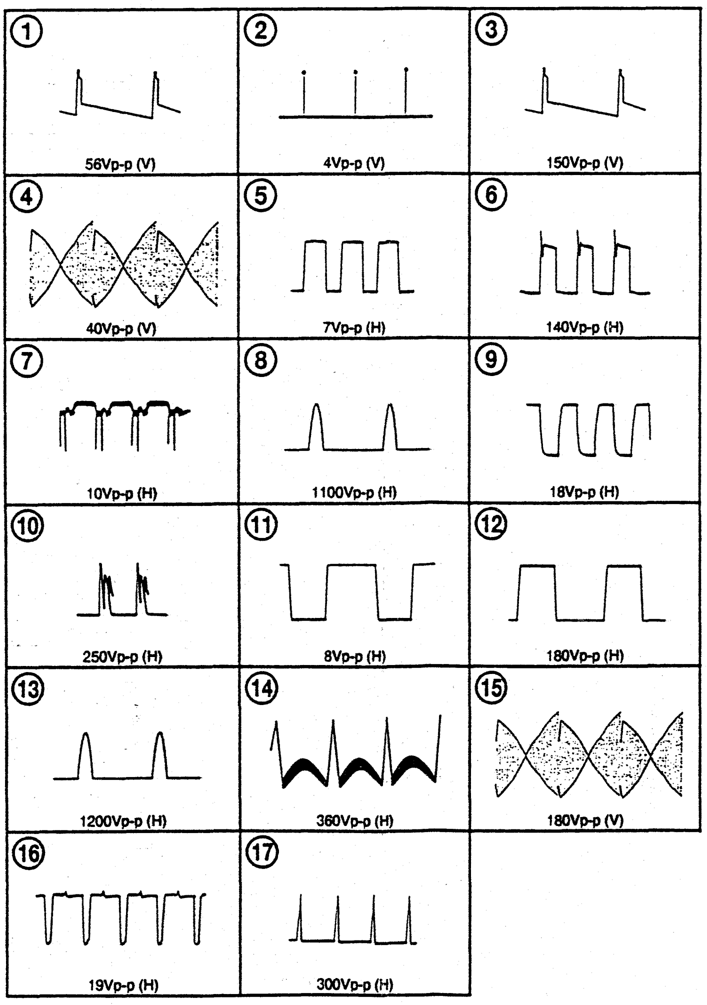
A BOARD IC504 STV9379

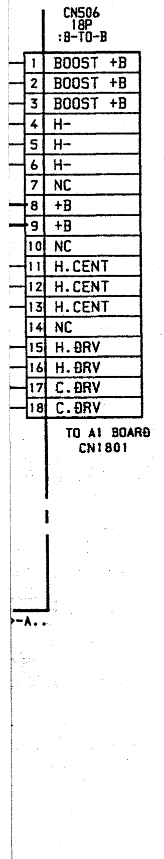

SUPPLY VOLTAGE
OUTPUT STAGE SUPPLY
FLYBACK GENERATOR
2
6
3
FLYBACK GENERATOR
INVERTING INPUT 1
NON-INVERTING INPUT 7
POWER AMPLIFIER
THERMAL PROTECTION
5 OUTPUT
4
GROUND

A BOARD IC560 HVPM-3A

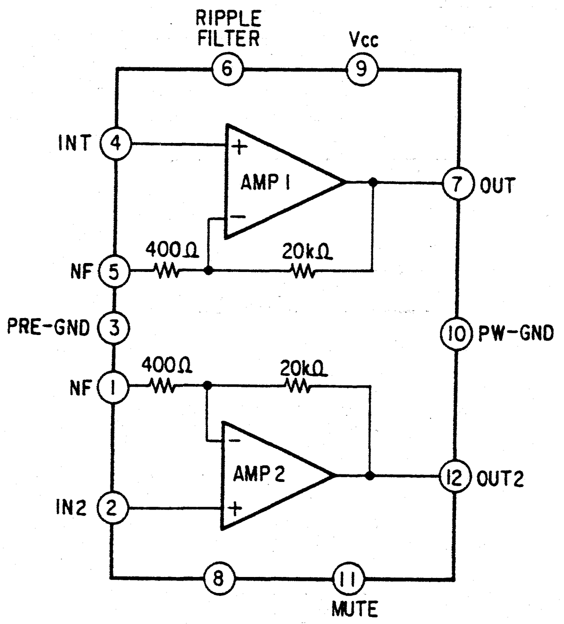

+B1 6
+B2 1
7 HV.ADJ OUT
2 VPR OUT
4 IK.PROT OUT
5 ABL OUT
8
3

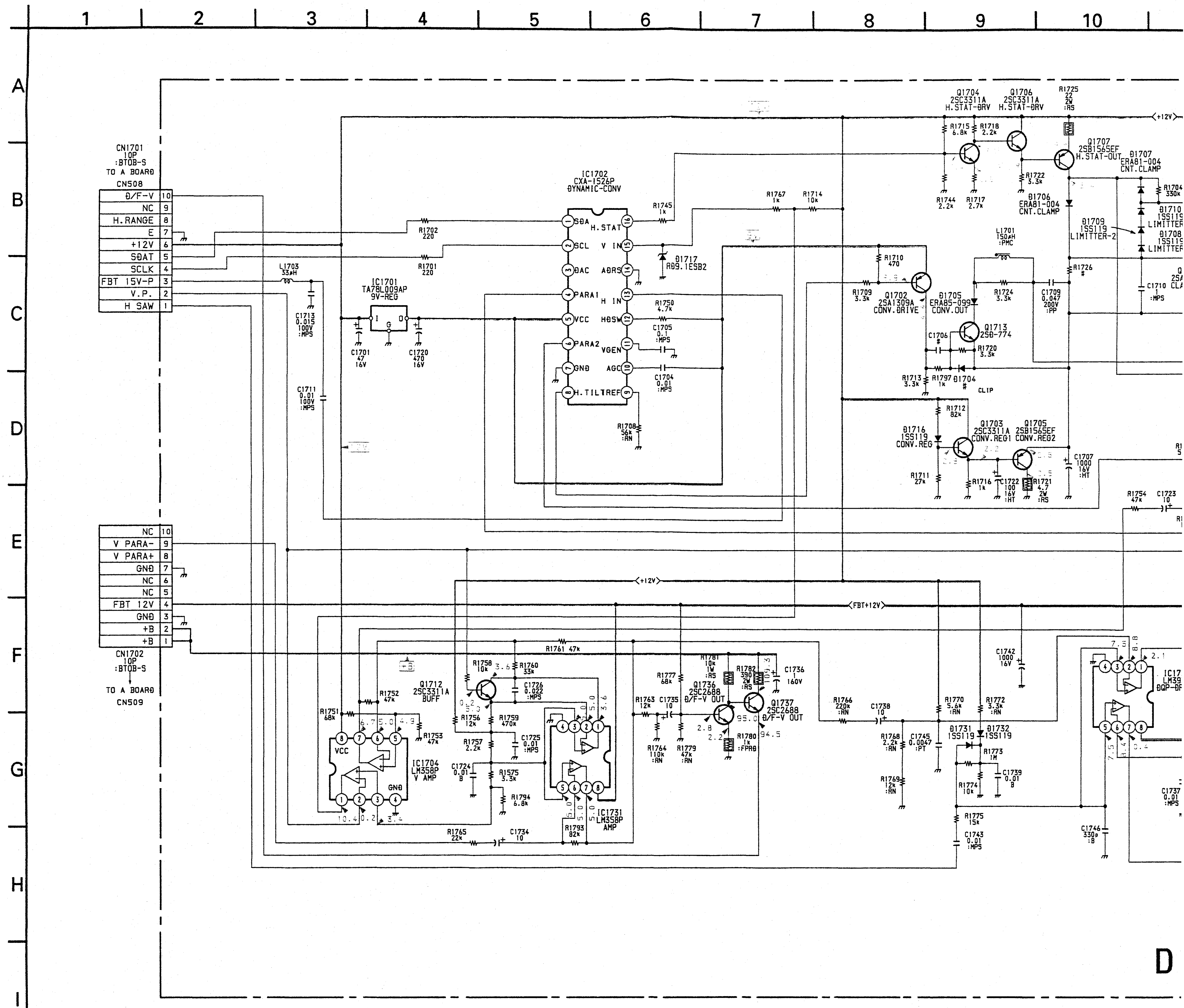
A BOARD

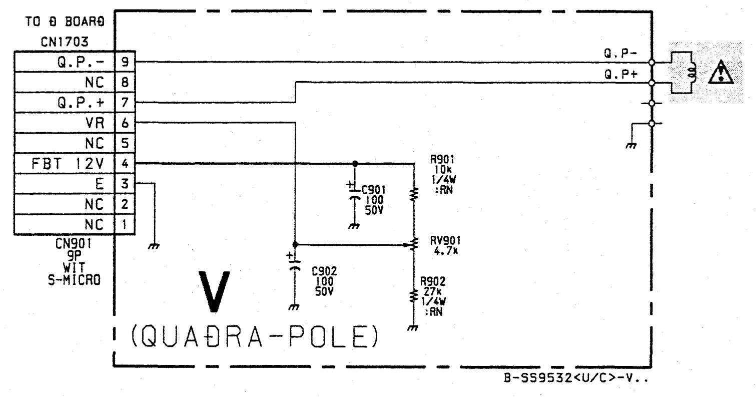



CN506
18P
:B-TO-B
1 BOOST +B
2 BOOST +B
3 BOOST +B
4 H-
5 H-
6 H-
7 NC
8 +B
9 +B
10 NC
11 H.CENT
12 H.CENT
13 H.CENT
14 NC
15 H.ÐRV
16 H.ÐRV
17 C.ÐRV
18 C.ÐRV
TO A1 BOARÐ
CN1801

A BOARD IC505 TA8216H

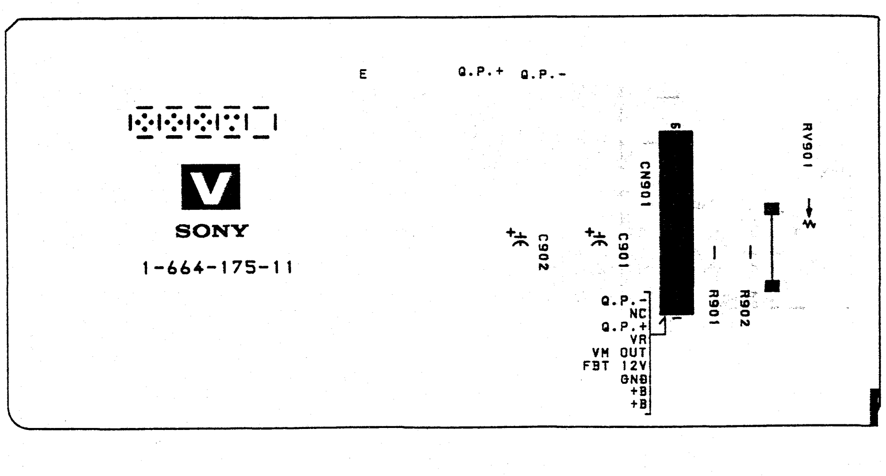

RIPPLE FILTER
Vcc
6
9
INT 4
AMP 1
7 OUT
NF 5
400Ω
20kΩ
PRE-GND 3
10 PW-GND
NF 1
400Ω
20kΩ
AMP 2
12 OUT2
IN2 2
8
11
MUTE


CN1701 10P :BTOB-S TO A BOARD CN508
Ø/F-V
H.RANGE
+12V
SDAT
SCLK
FBT 15V-P
V.P.
H SAW
IC1701 TA78L009AP 9V-REG
IC1702 CXA-1526P DYNAMIC-CONV
Q1704 2SC3311A H.STAT-DRV
Q1706 2SC3311A H.STAT-DRV
Q1707 2SB1565EF H.STAT-OUT
Q1702 2SA1309A CONV.DRIVE
Q1705 ERA85-099 CONV.OUT
Q1713 2SD-774
Q1703 2SC3311A CONV.REG1
Q1705 2SB1565EF CONV.REG2
Q1716 1SS119 CONV.REG
CN1702 10P :BTOB-S TO A BOARD CN509
V PARA-
V PARA+
FBT 12V
+B
IC1704 LM358P V AMP
Q1712 2SC3311A BUFF
IC1731 LM358P AMP
Q1736 2SC2688 D/F-V OUT
Q1737 2SC2688 D/F-V OUT
D


TO D BOARD CN1703
Q.P.-
Q.P.+
VR
FBT 12V
CN901 9P WIT S-MICRO
Q.P-
Q.P+
RV901 4.7k
V
(QUADRA-POLE)
B-SS9532<U/C>-V..

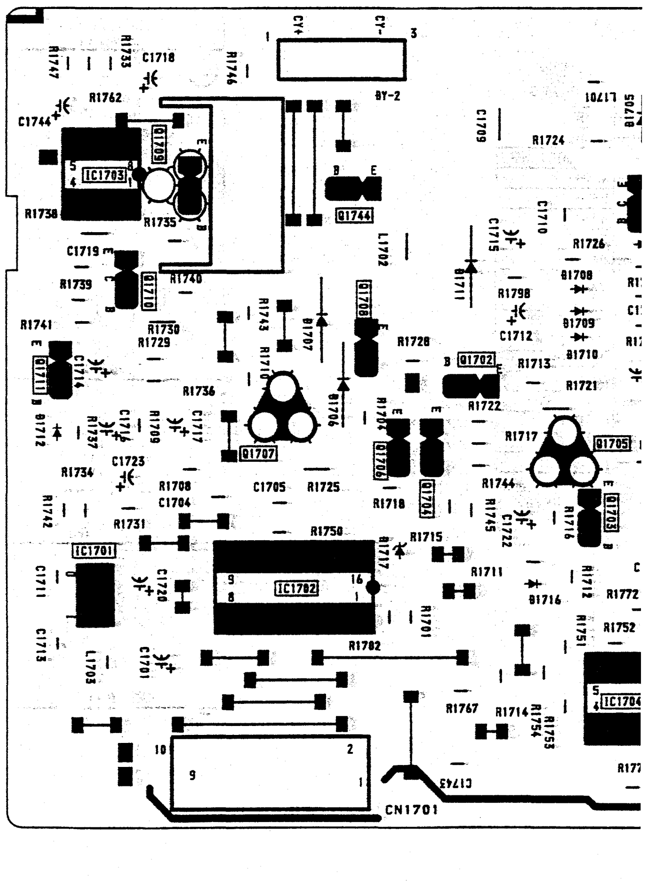
V [QUADRA-POLE]

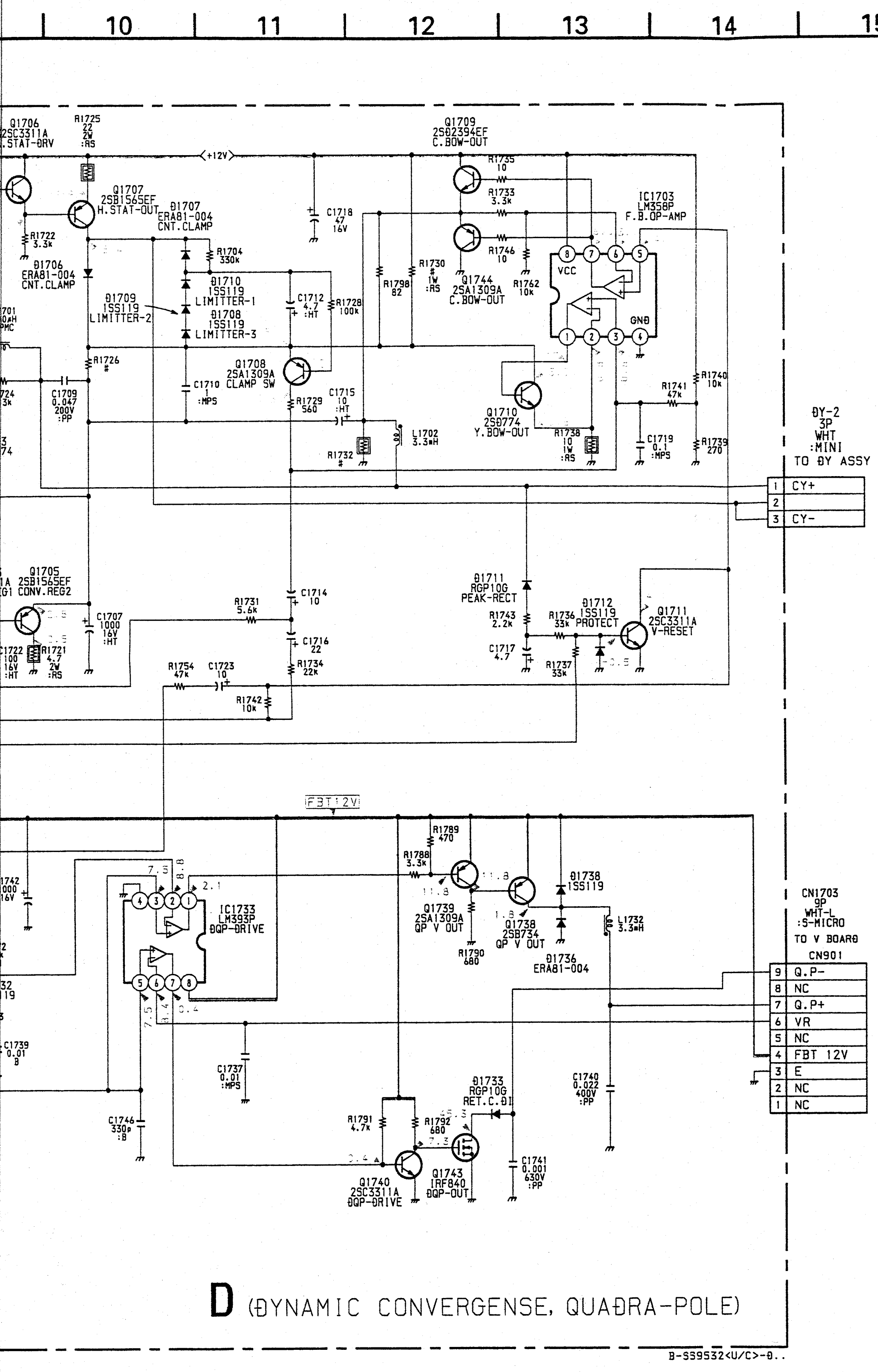
- V BOARD -

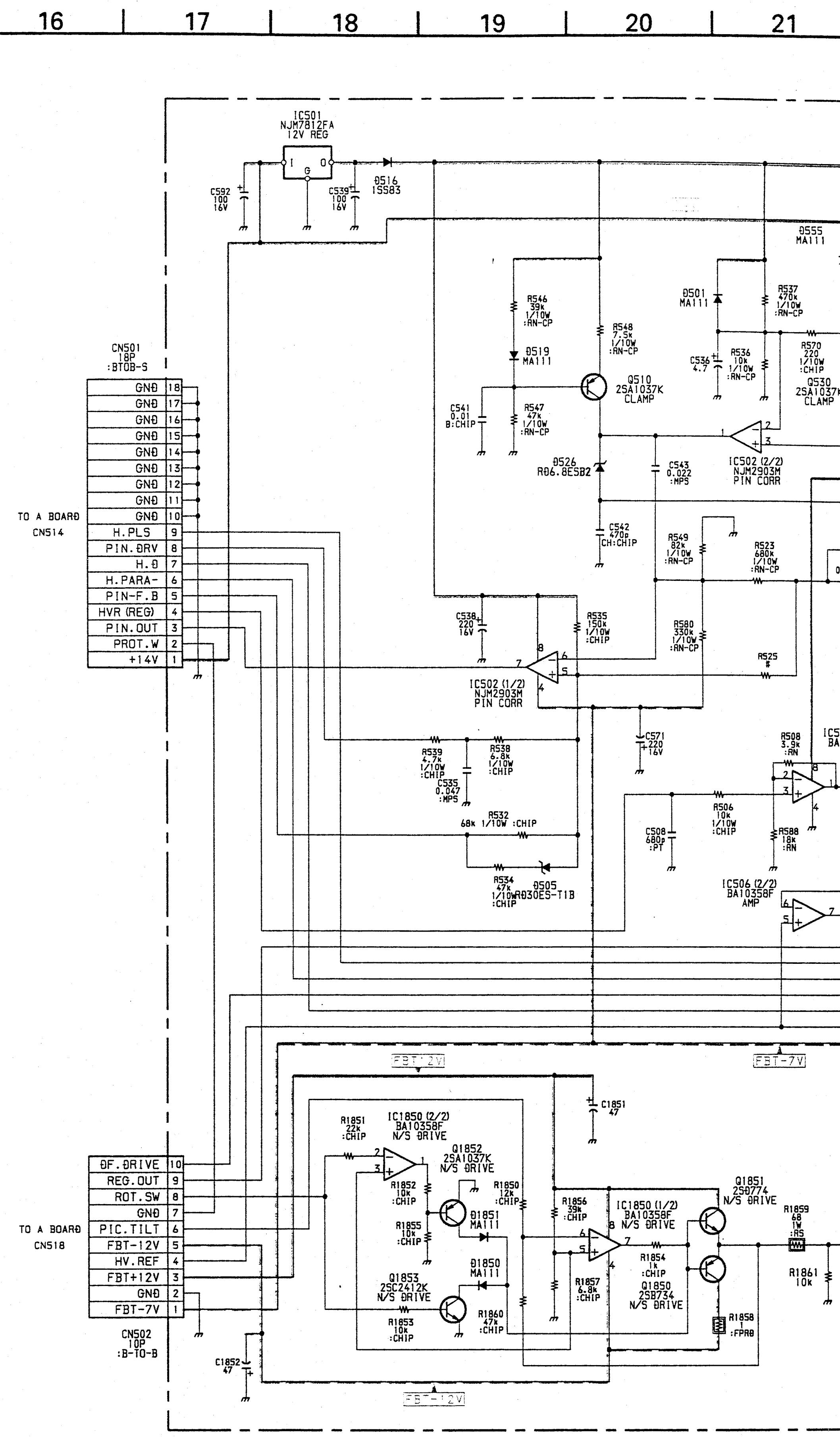

V
SONY
1-664-175-11
CN901
RV901
C901
C902
R901
R902
Q.P.+
Q.P.-

D [DYNAMIC CONVERGENCE, QUADRA-POLE]

- D BOARD -


IC1702
IC1701
IC1703
CN1701

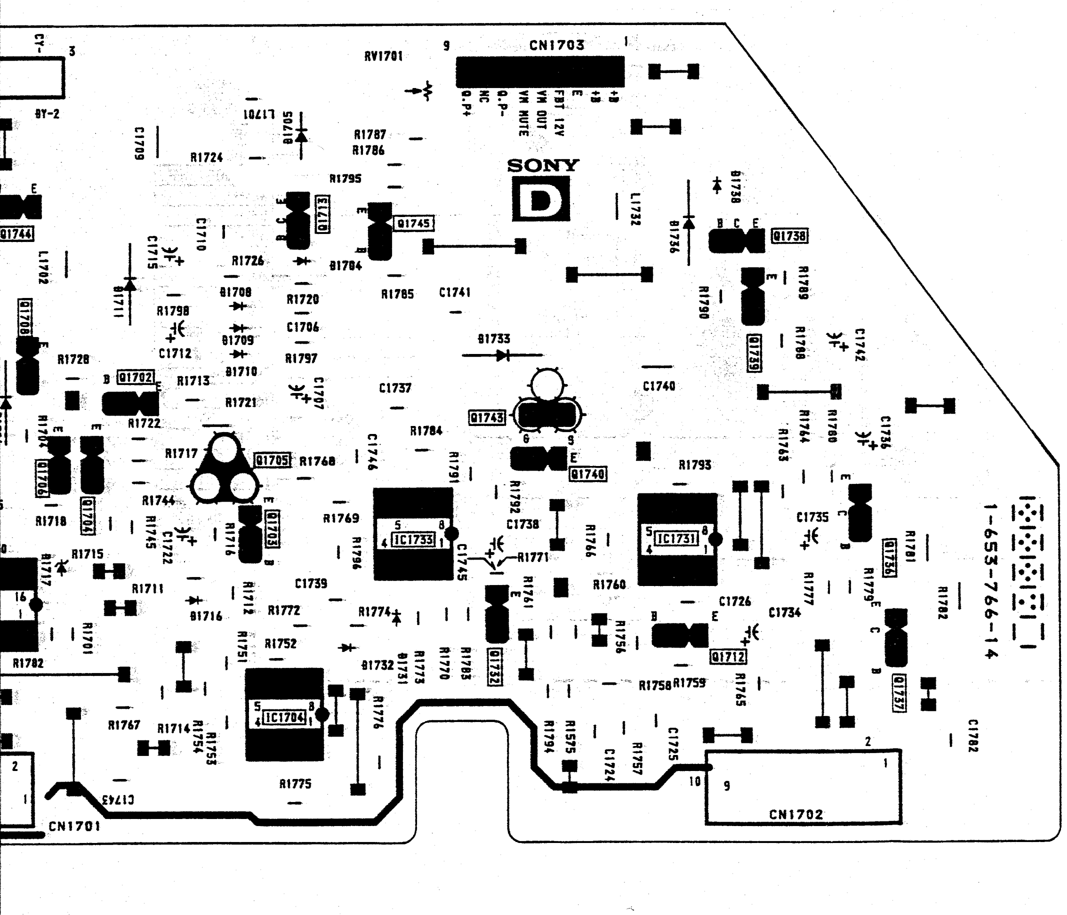

10
11
12
13
14
15
Q1709 2SD2394EF C.BOW-OUT
IC1703 LM358P F.B.OP-AMP
Q1707 2SB1565EF H.STAT-OUT
D1707 ERA81-004 CNT.CLAMP
Q1708 2SA1309A CLAMP SW
Q1744 2SA1309A C.BOW-OUT
Q1710 2SD774 Y.BOW-OUT
ĐY-2 3P WHT :MINI TO ĐY ASSY
CY+
CY-
Q1705 2SB1565EF
D1711 RGP10G PEAK-RECT
D1712 1SS119 PROTECT
Q1711 2SC3311A V-RESET
FBT12V
IC1733 LM393P ĐQP-DRIVE
Q1739 2SA1309A QP V OUT
Q1738 2SB734 QP V OUT
D1736 ERA81-004
CN1703 9P WHT-L :S-MICRO TO V BOARĐ CN901
Q.P-
NC
Q.P+
VR
NC
FBT 12V
E
NC
NC
D1733 RGP10G RET.C.ĐI
Q1740 2SC3311A ĐQP-DRIVE
Q1743 IRF840 ĐQP-OUT
D (ĐYNAMIC CONVERGENSE, QUAĐRA-POLE)
B-SS9532<U/C>-Đ..


16
17
18
19
20
21
IC501 NJM7812FA 12V REG
D516 1SS83
D555 MA111
D501 MA111
D519 MA111
Q510 2SA1037K CLAMP
Q530 2SA1037K CLAMP
D526 RD6.8ESB2
IC502 (2/2) NJM2903M PIN CORR
IC502 (1/2) NJM2903M PIN CORR
IC506 (2/2) BA10358F AMP
D505 RD30ES-T1B
CN501 18P :BTOB-S
TO A BOARĐ CN514
GNĐ
H.PLS
PIN.ĐRV
H.Đ
H.PARA-
PIN-F.B
HVR (REG)
PIN.OUT
PROT.W
+14V
FBT-12V
FBT-7V
TO A BOARĐ CN518
ĐF.ĐRIVE
REG.OUT
ROT.SW
GNĐ
PIC.TILT
FBT-12V
HV.REF
FBT+12V
GNĐ
FBT-7V
CN502 10P :B-TO-B
IC1850 (2/2) BA10358F N/S ĐRIVE
IC1850 (1/2) BA10358F N/S ĐRIVE
Q1852 2SA1037K N/S ĐRIVE
Q1853 2SC2412K N/S ĐRIVE
Q1851 2SD774 N/S ĐRIVE
Q1850 2SB734 N/S ĐRIVE
D1851 MA111
D1850 MA111

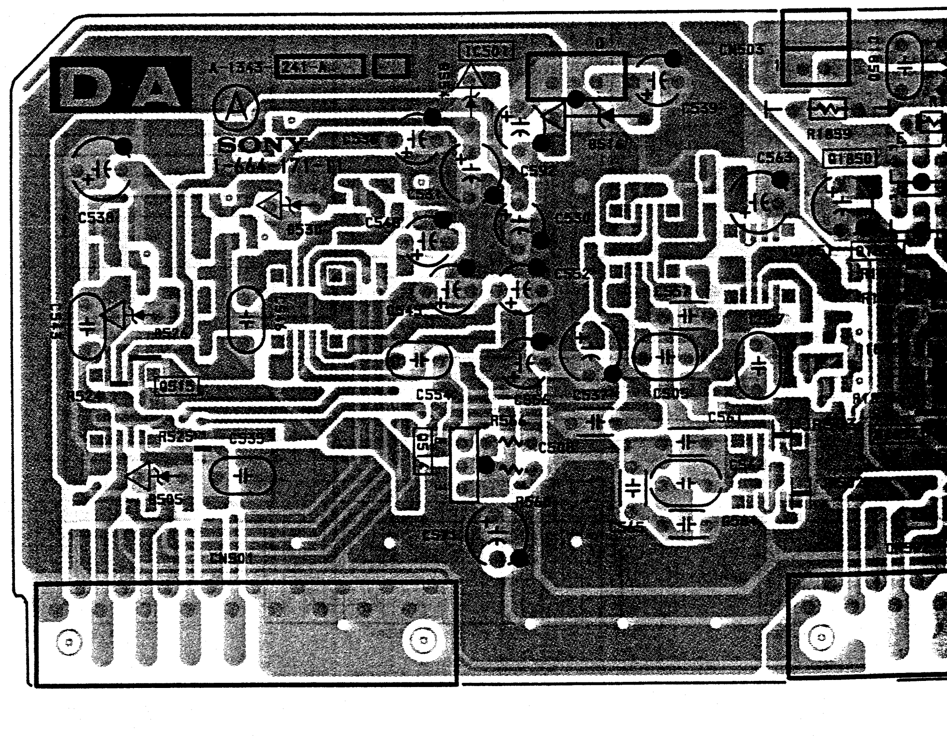
GENCE, QUADRA-POLE]

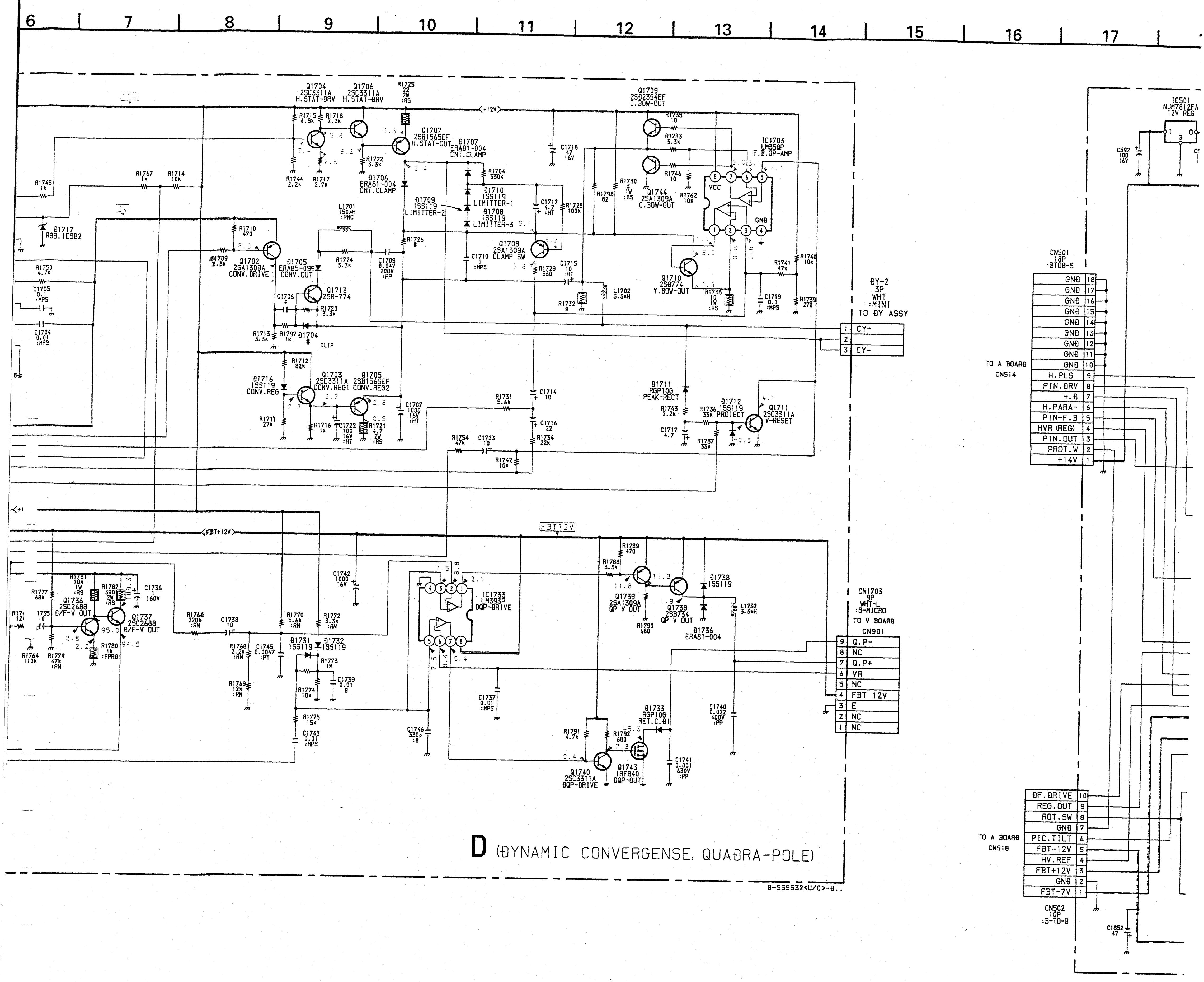
DA [PIN CORR, H DF DRIVE, N/S DRIVE]

- ▨ : Pattern from the side which enables seein
- ▩ : Pattern of the rear side.


CN1703
CN1701
CN1702
SONY
D
1-653-766-14
IC1733
IC1731
IC1704
RV1701

- DA BOARD - <Component Side>

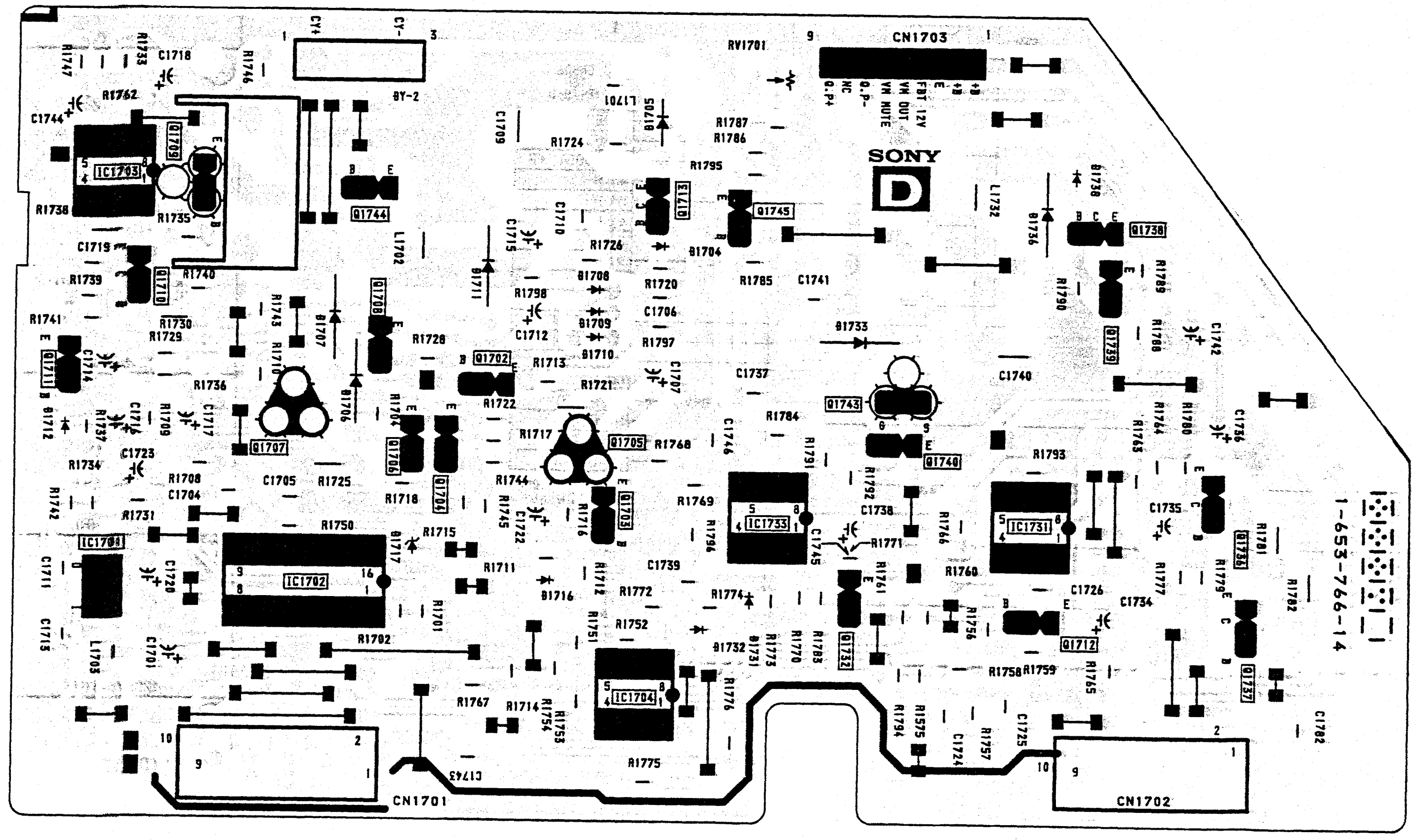



6
7
8
9
10
11
12
13
14
15
16
17
Q1704 2SC3311A H.STAT-DRV
Q1706 2SC3311A H.STAT-DRV
Q1707 2SB1565EF H.STAT-OUT
Q1709 2SD2394EF C.BOW-OUT
IC1703 LM358P F.B.OP-AMP
Q1744 2SA1309A C.BOW-OUT
Q1702 2SA1309A CONV.DRIVE
Q1705 ERA85-009 CONV.OUT
Q1713 2SB-774
Q1708 2SA1309A CLAMP SW
Q1710 2SD774 Y.BOW-OUT
Q1703 2SC3311A CONV.REG1
Q1705 2SB1565EF CONV.REG2
Q1716 1SS119 CONV.REG
Q1711 RGP10G PEAK-RECT
Q1712 1SS119 PROTECT
Q1711 2SC3311A V-RESET
Q1717 RD9.1ESB2
BY-2 3P WHT :MINI TO BY ASSY
CY+
CY-
CN501 18P :BTOB-S
TO A BOARD CN514
GND
H.PLS
PIN.DRV
H.D
H.PARA-
PIN-F.B
HVR (REG)
PIN.OUT
PROT.W
+14V
IC501 NJM7812FA 12V REG
<FBT+12V>
FBT12V
IC1733 LM393P QP-DRIVE
Q1736 2SC2688 D/F-V OUT
Q1737 2SC2688 D/F-V OUT
Q1739 2SA1309A QP V OUT
Q1738 2SB734 QP V OUT
Q1738 1SS119
Q1736 ERA81-004
Q1731 1SS119
Q1732 1SS119
Q1733 RGP10G RET.C.DI
Q1740 2SC3311A QP-DRIVE
Q1743 IRF840 QP-OUT
CN1703 9P WHT-L :S-MICRO TO V BOARD CN901
Q.P-
NC
Q.P+
VR
FBT 12V
E
DF.DRIVE
REG.OUT
ROT.SW
PIC.TILT
FBT-12V
HV.REF
FBT+12V
FBT-7V
TO A BOARD CN518
CN502 10P :B-TO-B
D (DYNAMIC CONVERGENSE, QUADRA-POLE)
B-SS9532<U/C>-D..

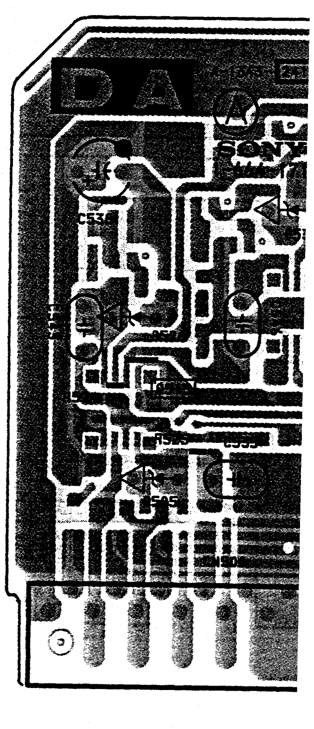
D [DYNAMIC CONVERGENCE, QUADRA-POLE]

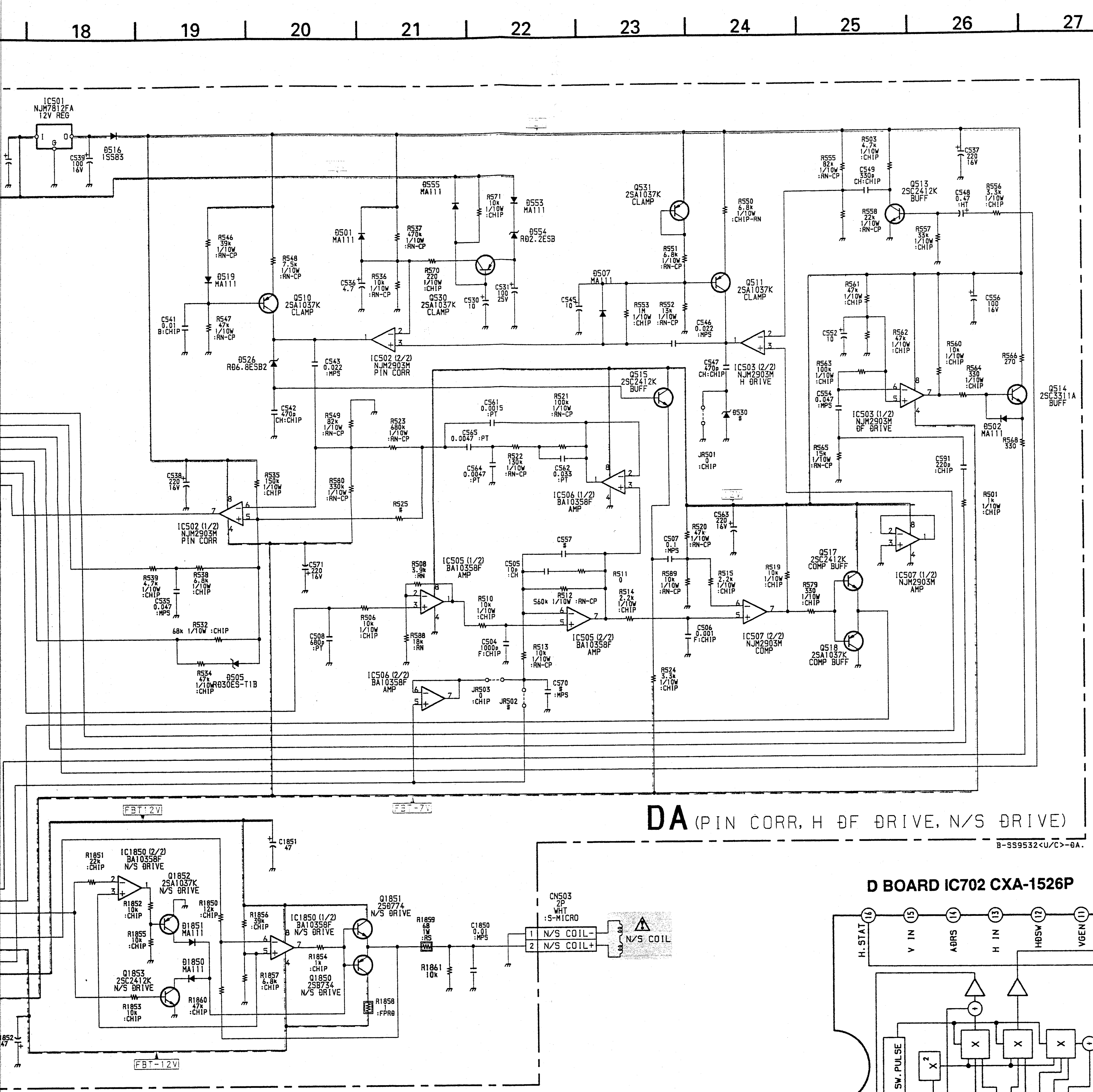
DA [PIN CORR, H DF DRIVE, N/S DRIVE]

- D BOARD -

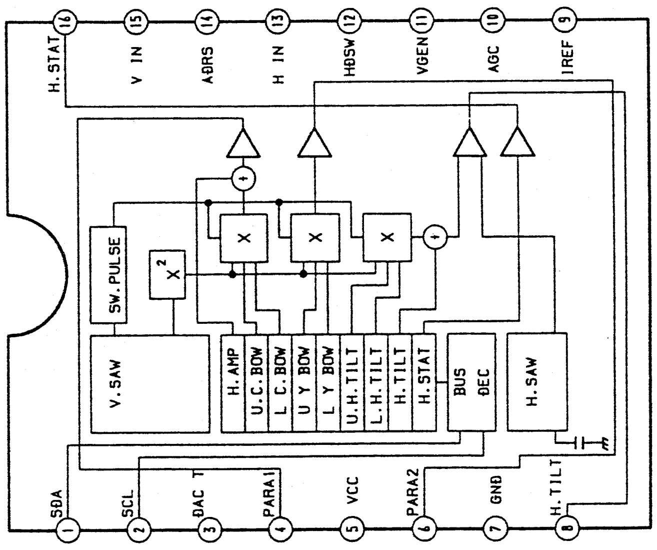

CN1703
SONY
D
IC1703
IC1702
IC1733
IC1731
IC1704
CN1701
CN1702
1-653-766-14

- DA BOARD - <Compo



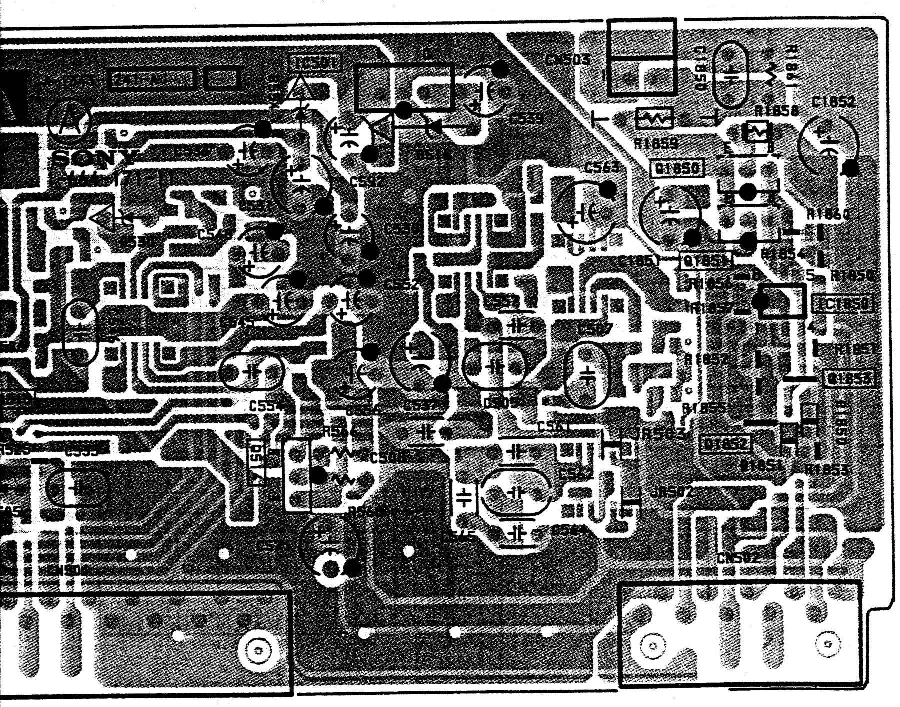

18
19
20
21
22
23
24
25
26
27
IC501 NJM7812FA 12V REG
D516 1SS83
Q510 2SA1037K CLAMP
Q530 2SA1037K CLAMP
Q531 2SA1037K CLAMP
Q511 2SA1037K CLAMP
Q513 2SC2412K BUFF
Q515 2SC2412K BUFF
Q514 2SC3311A BUFF
IC502 (2/2) NJM2903M PIN CORR
IC502 (1/2) NJM2903M PIN CORR
IC503 (2/2) NJM2903M H DRIVE
IC503 (1/2) NJM2903M DF DRIVE
IC506 (1/2) BA10358F AMP
IC506 (2/2) BA10358F AMP
IC505 (1/2) BA10358F AMP
IC505 (2/2) BA10358F AMP
IC507 (1/2) NJM2903M AMP
IC507 (2/2) NJM2903M COMP
Q517 2SC2412K COMP BUFF
Q518 2SA1037K COMP BUFF
FBT 12V
FBT -7V
FBT -12V
DA (PIN CORR, H DF DRIVE, N/S DRIVE)
B-SS9532<U/C>-DA.
IC1850 (2/2) BA10358F N/S DRIVE
IC1850 (1/2) BA10358F N/S DRIVE
Q1852 2SA1037K N/S DRIVE
Q1853 2SC2412K N/S DRIVE
Q1851 2SD774 N/S DRIVE
Q1850 2SB734 N/S DRIVE
CN503 2P WHT :S-MICRO
1 N/S COIL-
2 N/S COIL+
N/S COIL

D BOARD IC702 CXA-1526P

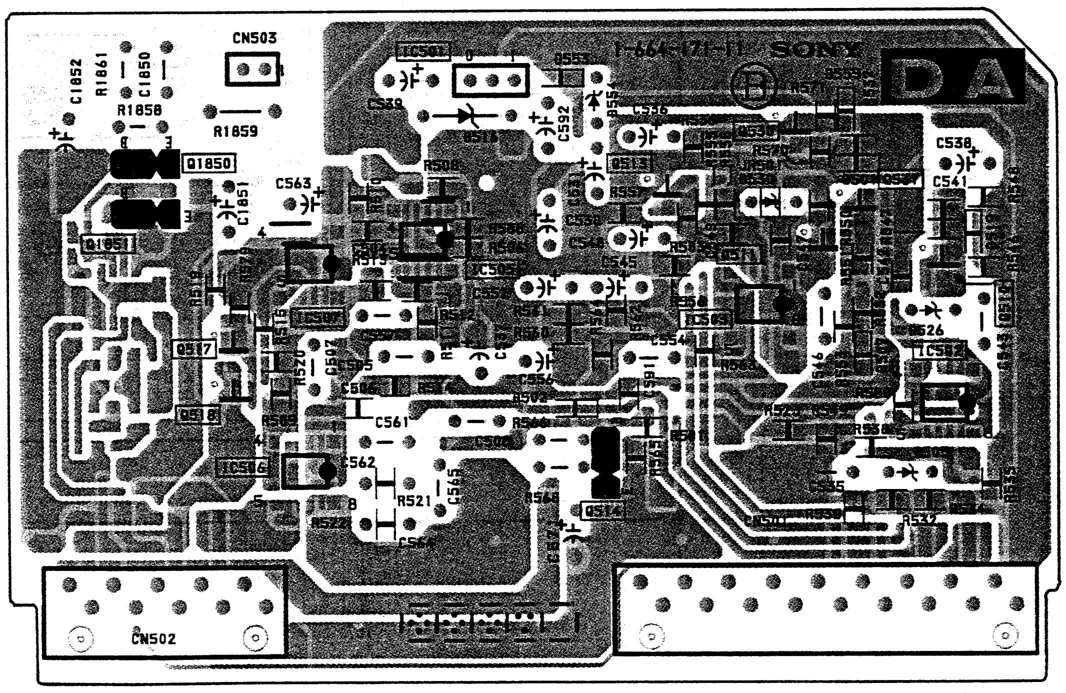

16 H.STAT
15 V IN
14 ABRS
13 H IN
12 HDSW
11 VGEN
10 AGC
9 IREF
SW.PULSE
X²
X
X
X
V.SAW
H.AMP
U.C.BOW
L.C.BOW
U.Y.BOW
L.Y.BOW
U.H.TILT
L.H.TILT
H.TILT
H.STAT
BUS DEC
H.SAW
1 SDA
2 SCL
3 DAC T
4 PARA1
5 VCC
6 PARA2
7 GND
8 H.TILT

- ░ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.

RD – <Component Side>

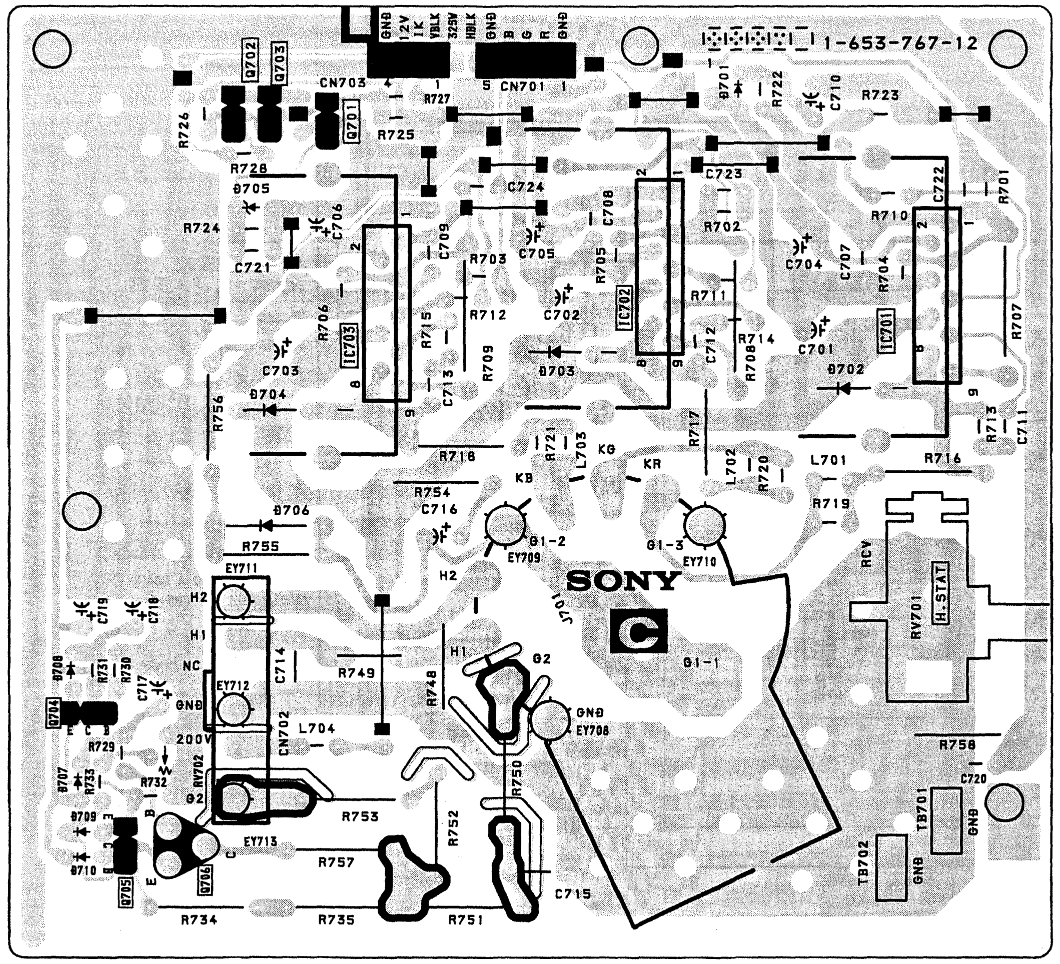


<Conductor Side>

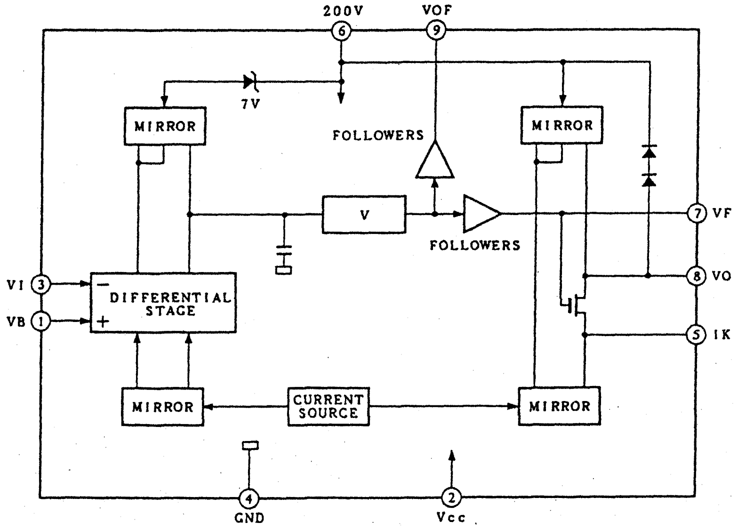

CN503
CN502
DA
SONY
1-664-171-11

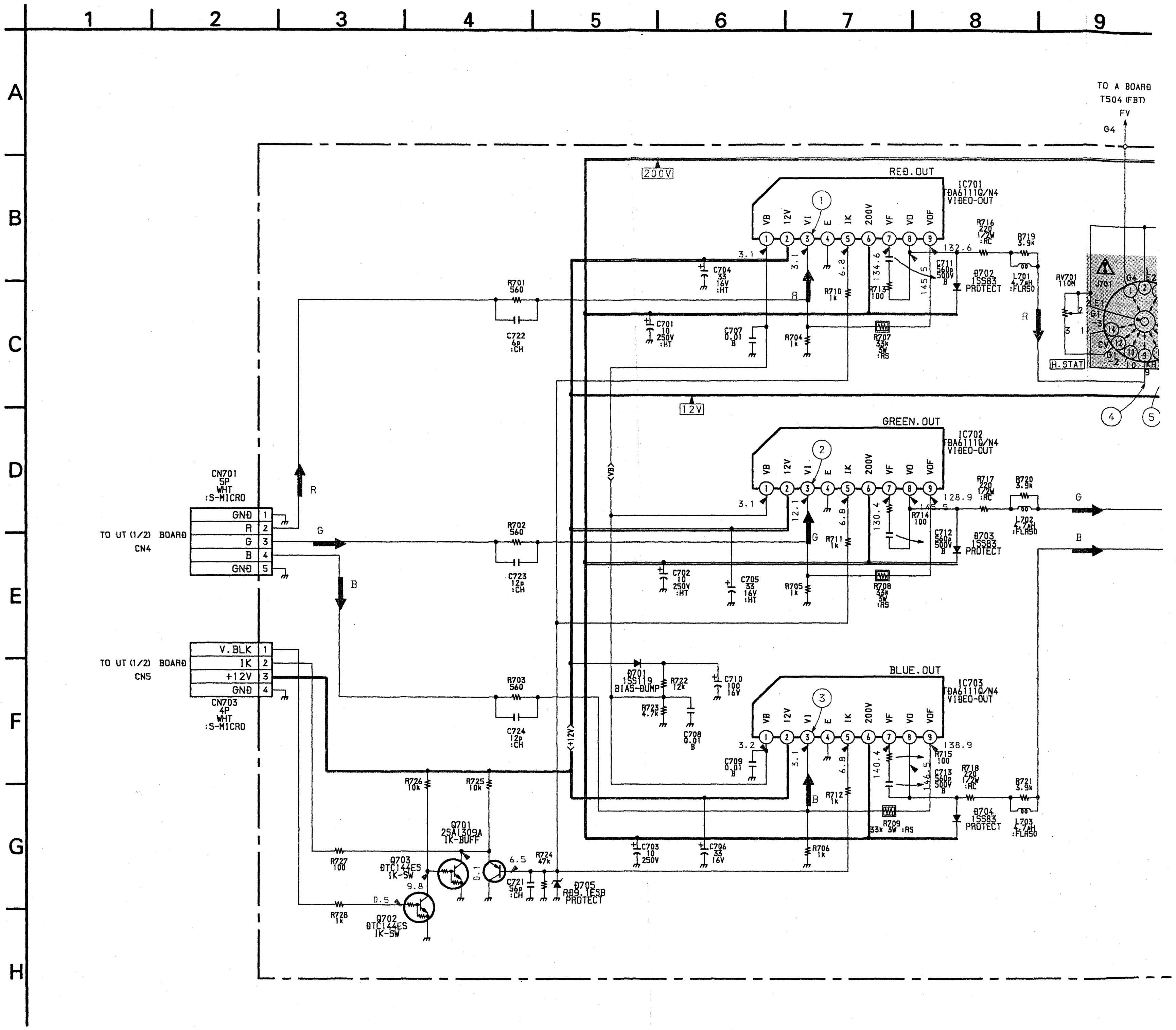
C [VIDEO OUT, G2 REG]

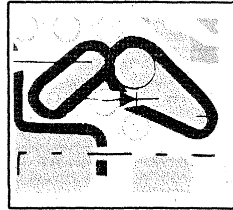
– C BOARD –


1-653-767-12
CN701
CN703
IC701
IC702
IC703
SONY
C
J701
RV701
H.STAT
TB701
TB702
EY708
EY709
EY710
EY711
EY712
EY713
G1-1
G1-2
G1-3
G2
KR
KG
KB
200V
GND

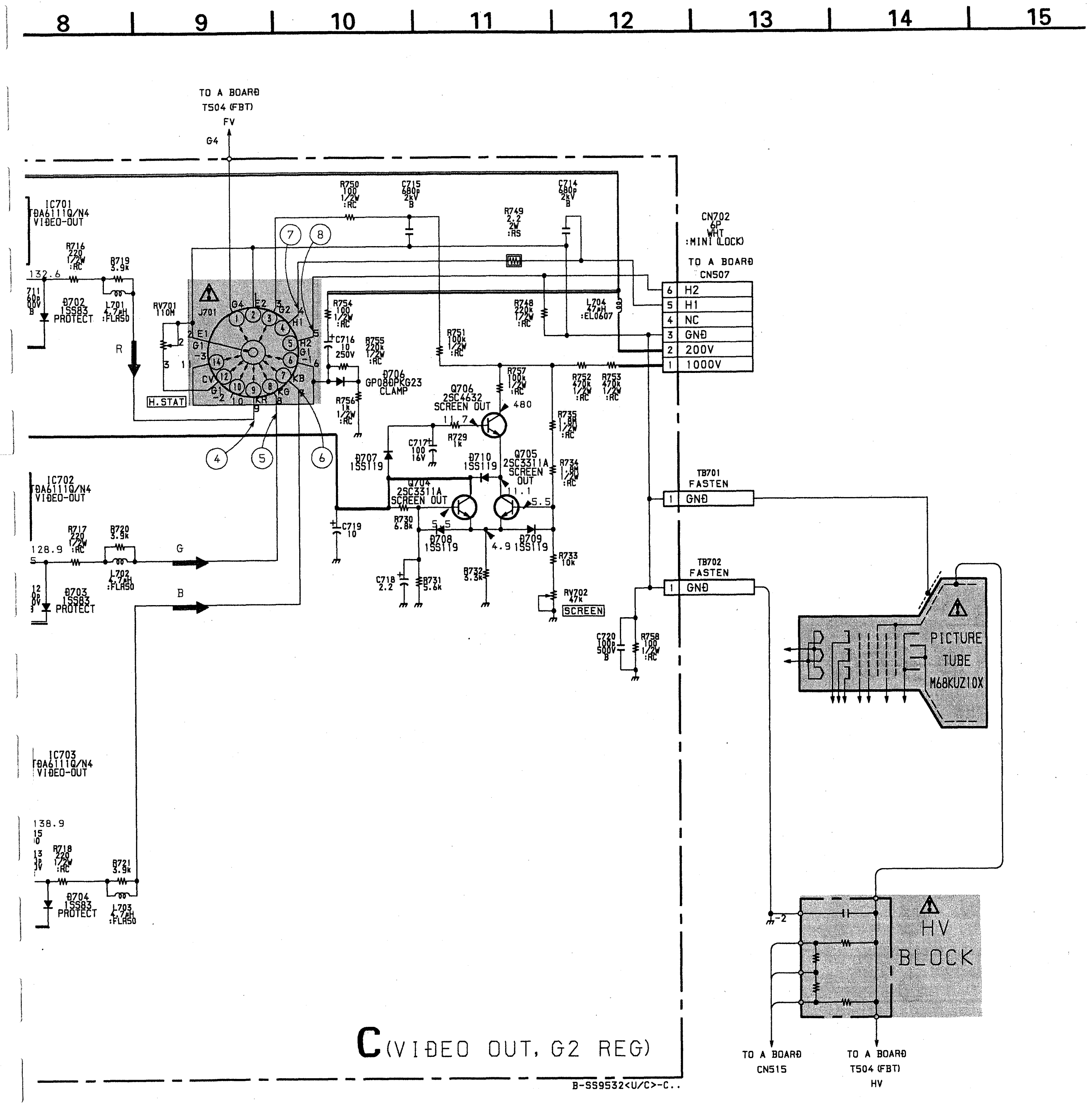
C BOARD IC701, IC702, IC703 TDA6111Q


200V
VOF
6
9
MIRROR
7V
FOLLOWERS
MIRROR
V
FOLLOWERS
7 VF
8 VO
5 IK
VI 3
VB 1
DIFFERENTIAL STAGE
MIRROR
CURRENT SOURCE
MIRROR
4 GND
2 Vcc

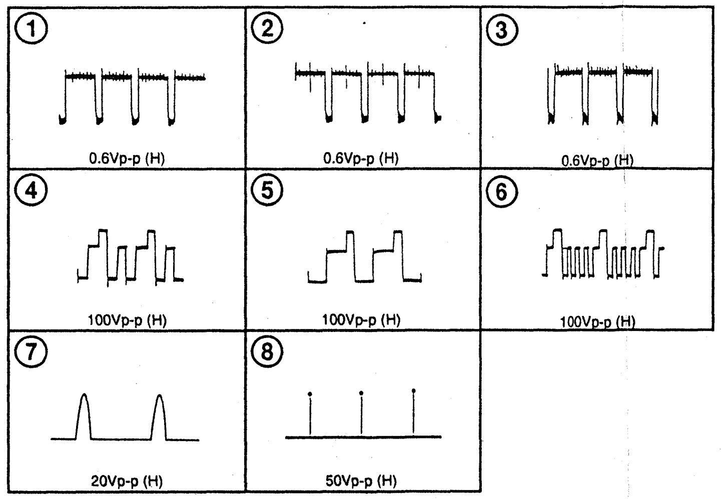

1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
H
TO A BOARD T504 (FBT)
FV
G4
200V
RED.OUT
IC701 TDA6111Q/N4 VIDEO-OUT
12V
GREEN.OUT
IC702 TDA6111Q/N4 VIDEO-OUT
BLUE.OUT
IC703 TDA6111Q/N4 VIDEO-OUT
VB 12V VI E IK 200V VF VO VOF
CN701 5P WHT :S-MICRO
TO UT (1/2) BOARD CN4
GND
R
G
B
GND
TO UT (1/2) BOARD CN5
V.BLK
IK
+12V
GND
CN703 4P WHT :S-MICRO
Q701 2SA1309A IK-BUFF
Q703 DTC144ES IK-SW
Q702 DTC144ES IK-SW
D705 RD5.1ESB PROTECT
D701 1SS119 BIAS-DUMP
D702 1SS83 PROTECT
D703 1SS83 PROTECT
D704 1SS83 PROTECT
L701 4.7μH :FLASG
L702 4.7μH :FLASG
L703 4.7μH :FLASG
RV701 10M
J701
H.STAT



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

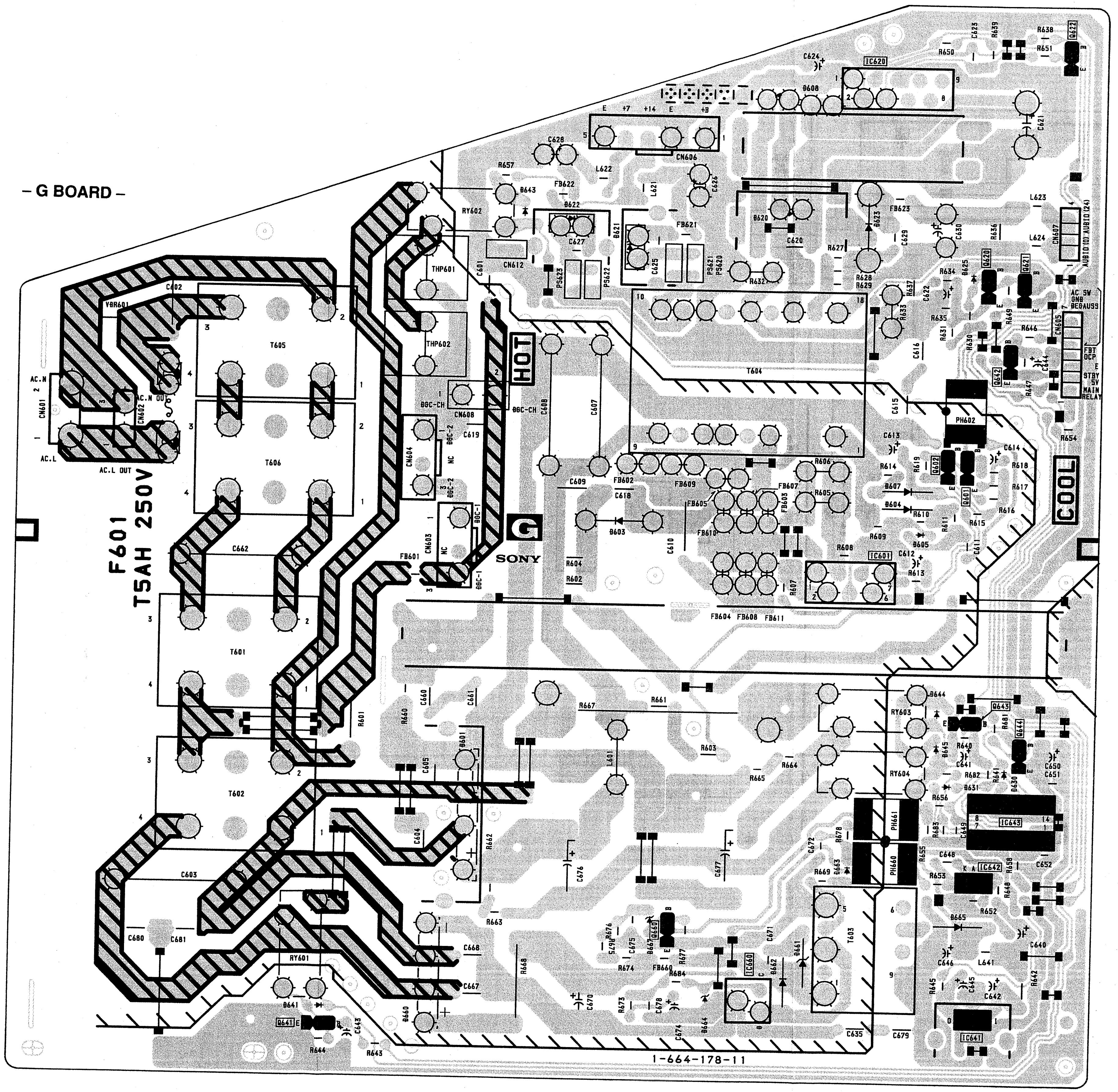

8
9
10
11
12
13
14
15
TO A BOARD
T504 (FBT)
FV
G4
IC701
TDA6111Q/N4
VIDEO-OUT
R716
220
1/2W
:RC
R719
3.9k
132.6
D702
1SS83
PROTECT
L701
4.7µH
:FLR50
RV701
110M
J701
H.STAT
R
IC702
TDA6111Q/N4
VIDEO-OUT
R717
220
1/2W
:RC
R720
3.9k
128.9
G
L702
4.7µH
:FLR50
D703
1SS83
PROTECT
B
IC703
TDA6111Q/N4
VIDEO-OUT
138.9
R718
220
1/2W
:RC
R721
3.9k
D704
1SS83
PROTECT
L703
4.7µH
:FLR50
G4
E2
G2
H1
H2
E1
G1
CV
KB
KG
KR
R750
100
1/2W
:RC
C715
680p
2kV
B
R749
2.2
2W
:RS
C714
680p
2kV
B
R754
100
1/2W
:RC
C716
10
250V
R755
220k
1/2W
:RC
D706
GP08DPKG23
CLAMP
R756
1k
1/2W
:RC
R751
100k
1/2W
:RC
R748
220k
1/2W
:RC
L704
47µH
:EL0607
Q706
2SC4632
SCREEN OUT
R757
100k
1/2W
:RC
480
11.7
R729
1k
C717
100
16V
D707
1SS119
D710
1SS119
Q705
2SC3311A
SCREEN
OUT
11.1
Q704
2SC3311A
SCREEN OUT
5.5
R730
6.8k
D708
1SS119
4.9
D709
1SS119
C719
10
C718
2.2
R731
5.6k
R732
3.3k
R752
470k
1/2W
:RC
R753
470k
1/2W
:RC
R735
1.8M
1/2W
:RC
R734
1.8M
1/2W
:RC
R733
10k
RV702
47k
SCREEN
CN702
6P
WHT
:MINI (LOCK)
TO A BOARD
CN507
6 H2
5 H1
4 NC
3 GND
2 200V
1 1000V
TB701
FASTEN
1 GND
TB702
FASTEN
1 GND
C720
100p
500V
B
R758
100
1/2W
:RC
PICTURE
TUBE
M68KUZ10X
HV
BLOCK
TO A BOARD
CN515
TO A BOARD
T504 (FBT)
HV
C (VIDEO OUT, G2 REG)
B-SS9532<U/C>-C..

C BOARD


①
0.6Vp-p (H)
②
0.6Vp-p (H)
③
0.6Vp-p (H)
④
100Vp-p (H)
⑤
100Vp-p (H)
⑥
100Vp-p (H)
⑦
20Vp-p (H)
⑧
50Vp-p (H)

G [POWER SUPPLY]

– G BOARD –

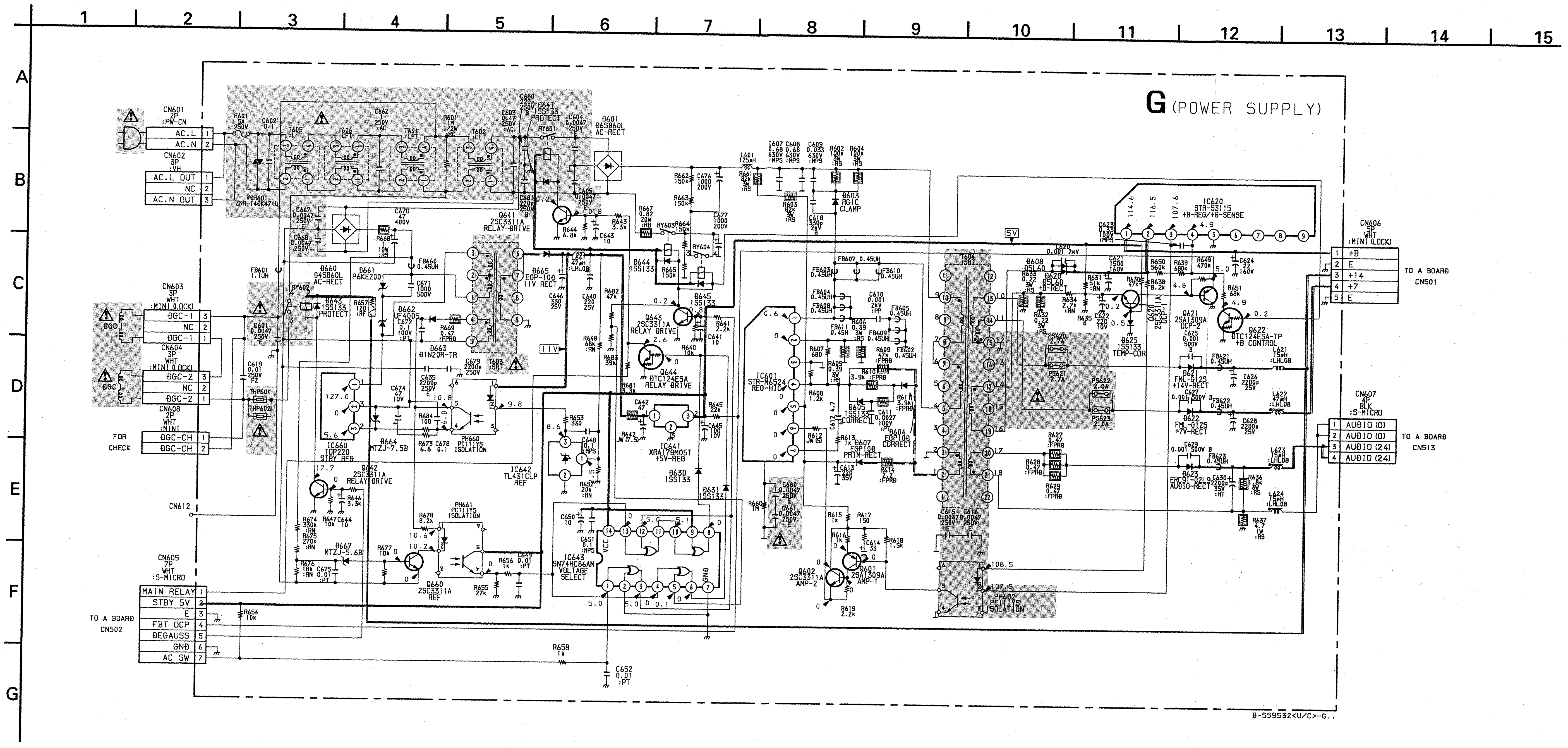

F601
T5AH 250V
HOT
COOL
SONY
G
1-664-178-11
AC.N
AC.L
AC.N OUT
AC.L OUT
CN601
CN602
VBR601
C602
T605
T606
T601
T602
T604
T603
C662
C603
C680
C681
RY601
RY602
RY603
RY604
THP601
THP602
CN603
CN604
CN605
CN606
CN607
CN608
CN612
BGC-CH
BGC-1
BGC-2
NC
FB601
C601
C607
C608
C609
C619
R601
R602
R604
L601
L621
L622
L623
L624
L641
IC601
IC620
IC641
IC642
IC643
IC660
PH602
PH660
PH661
Q601
Q602
Q620
Q621
Q622
Q641
Q642
Q643
Q644
Q660
E +7 +14 E +B
AUDIO(0) AUDIO(24)
AC SW
GND
BEGAUSS
FBT OCP
STBY 5V
MAIN RELAY

Schematic diagram

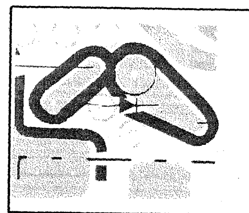
← C board

Schematic diagram

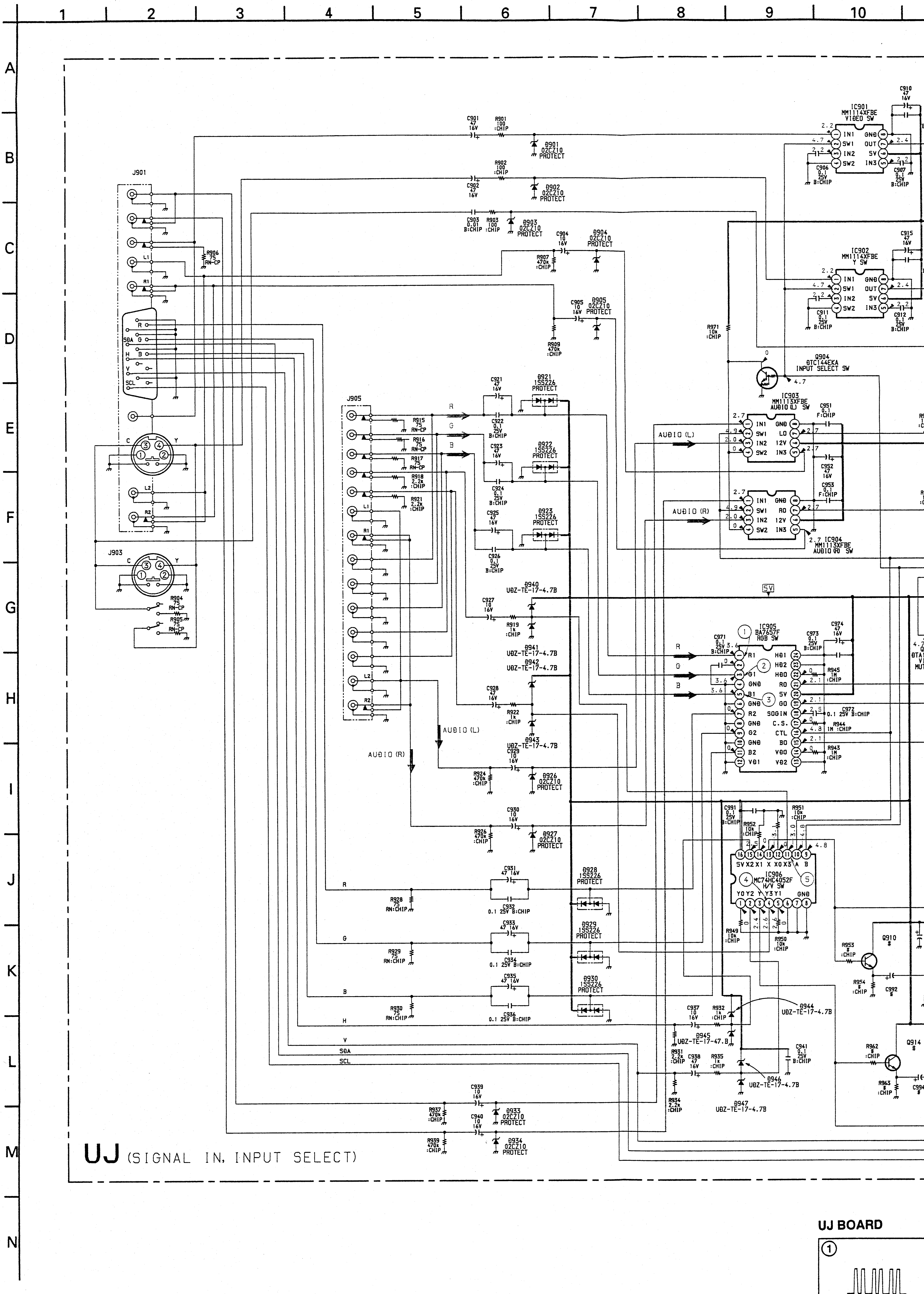
G board →



G (POWER SUPPLY)
CN601 2P :PW-CN
AC.L
AC.N
CN602 3P :VH
AC.L OUT
NC
AC.N OUT
VDR601 ZNR-14DK471U
F601 6A 250V
C602 0.1
T605 :LFT
T606 :LFT
T601 :LFT
T602 :LFT
C662 1 250V :AC
R601 1M 1/2W :RC
C603 0.47 250V :AC
C680 220p 250V
D641 1SS133 PROTECT
C604 0.0047 250V
D601 D6SB60L AC-RECT
RY601
Q641 2SC3311A RELAY-DRIVE
C670 47 400V
CN603 3P WHT :MINI LOCK
DGC-1
NC
DGC-1
CN604 3P WHT :MINI LOCK
DGC-2
NC
DGC-2
CN608 2P WHT :MINI
DGC-CH
DGC-CH
FOR CHECK
THP601
THP602
RY602
D643 1SS133 PROTECT
D660 D4SB60L AC-RECT
D661 P6KE200
D662 UF4005
D663 D1NZ0R-TR
T603 :SRT
IC660 TOP220 STBY REG
D664 MTZJ-7.5B
PH660 PC111YS ISOLATION
Q642 2SC3311A RELAY DRIVE
D667 MTZJ-5.6B
PH661 PC111YS ISOLATION
Q660 2SC3311A REF
IC642 TL431CLP REF
D665 EGP-10B 11V RECT
11V
CN612
CN605 7P WHT :S-MICRO
MAIN RELAY
STBY 5V
E
FBT OCP
DEGAUSS
GND
AC SW
TO A BOARD CN502
IC643 SN74HC86AN VOLTAGE SELECT
VCC
GND
Q643 2SC3311A RELAY DRIVE
Q644 DTC124ESA RELAY DRIVE
Q645 1SS133
IC641 XRA178M05T +5V-REG
D630 1SS133
D631 1SS133
D644 1SS133
RY603
RY604
IC601 STR-M6524 REG-HIC
D603 RGTC CLAMP
FB607 0.45UH
FB610 0.45UH
D605 1SS133 CORRECT
D604 EGP10B CORRECT
D607 EGP10B PRIM-RECT
Q602 2SC3311A AMP-2
Q601 2SA1309A AMP-1
T604 :SRT
PH602 PC111YS ISOLATION
5V
D608 RSL60 +B-RECT
IC620 STR-S3115 +B-REG/+B-SENSE
Q620 2SC3311A
Q625 1SS133 TEMP-COR
Q621 2SA1309A OCP-2
Q622 DTC124ESA-TP +B CONTROL
PS620 2.7A
PS621 2.7A
PS622 2.0A
PS623 2.0A
D621 FML-G12S +14V-RECT
D622 FML-G12S +7V-RECT
D623 ERC91-02L AUDIO-RECT
CN606 5P WHT :MINI LOCK
+B
E
+14
+7
E
TO A BOARD CN501
CN607 4P BLK :S-MICRO
AUDIO (0)
AUDIO (0)
AUDIO (24)
AUDIO (24)
TO A BOARD CN513
B-SS9532<U/C>-G..

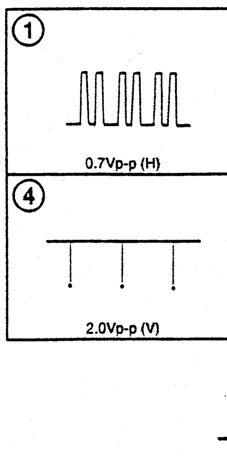


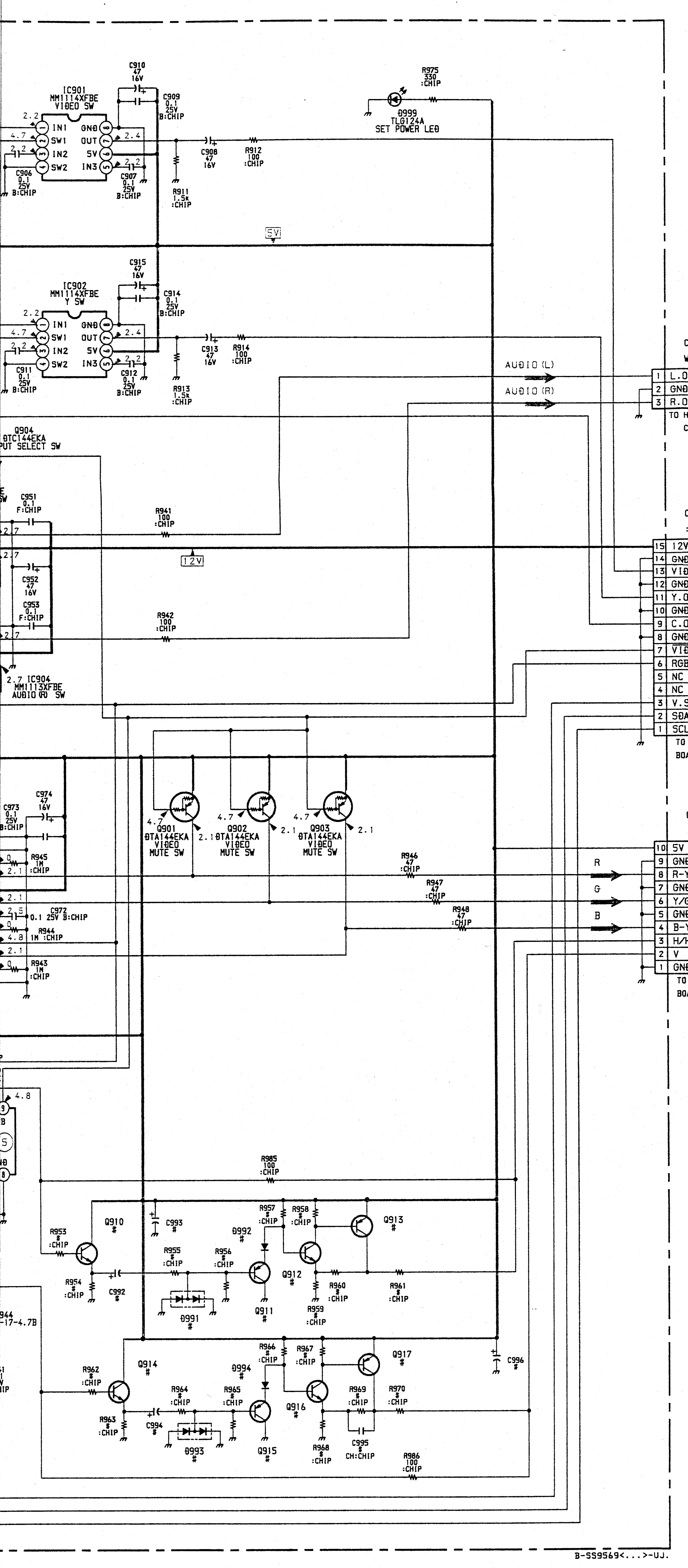
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

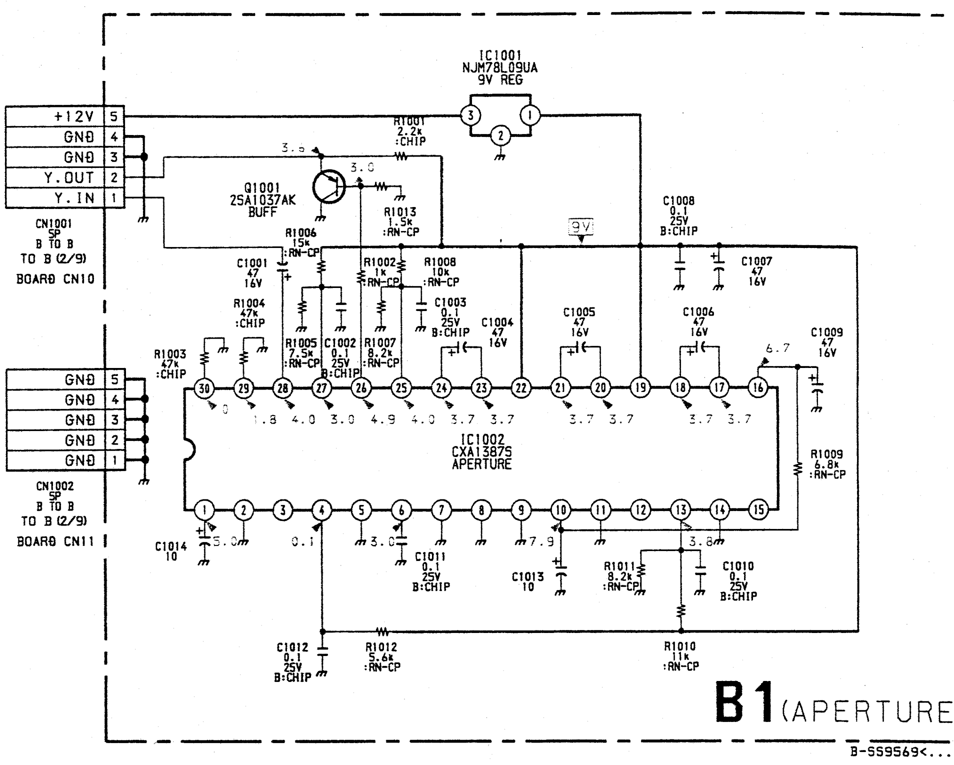

1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
H
I
J
K
L
M
N
J901
J903
J905
IC901
MM1114XFBE
VIDEO SW
IC902
MM1114XFBE
Y SW
IC903
MM1113XFBE
AUDIO (L) SW
IC904
MM1113XFBE
AUDIO (R) SW
IC905
BA7657F
RGB SW
IC906
MC74HC4052F
H/V SW
Q904
DTC144EKA
INPUT SELECT SW
D901 02CZ10 PROTECT
D902 02CZ10 PROTECT
D903 02CZ10 PROTECT
D904 02CZ10 PROTECT
D905 02CZ10 PROTECT
D921 1SS226 PROTECT
D922 1SS226 PROTECT
D923 1SS226 PROTECT
D940 UDZ-TE-17-4.7B
D941 UDZ-TE-17-4.7B
D942 UDZ-TE-17-4.7B
D943 UDZ-TE-17-4.7B
D926 02CZ10 PROTECT
D927 02CZ10 PROTECT
D928 1SS226 PROTECT
D929 1SS226 PROTECT
D930 1SS226 PROTECT
D933 02CZ10 PROTECT
D934 02CZ10 PROTECT
D944 UDZ-TE-17-4.7B
D945 UDZ-TE-17-4.7B
D946 UDZ-TE-17-4.7B
D947 UDZ-TE-17-4.7B
Q910
Q914
AUDIO (L)
AUDIO (R)
R
G
B
H
V
SDA
SCL
5V
C
Y
L1
R1
L2
R2

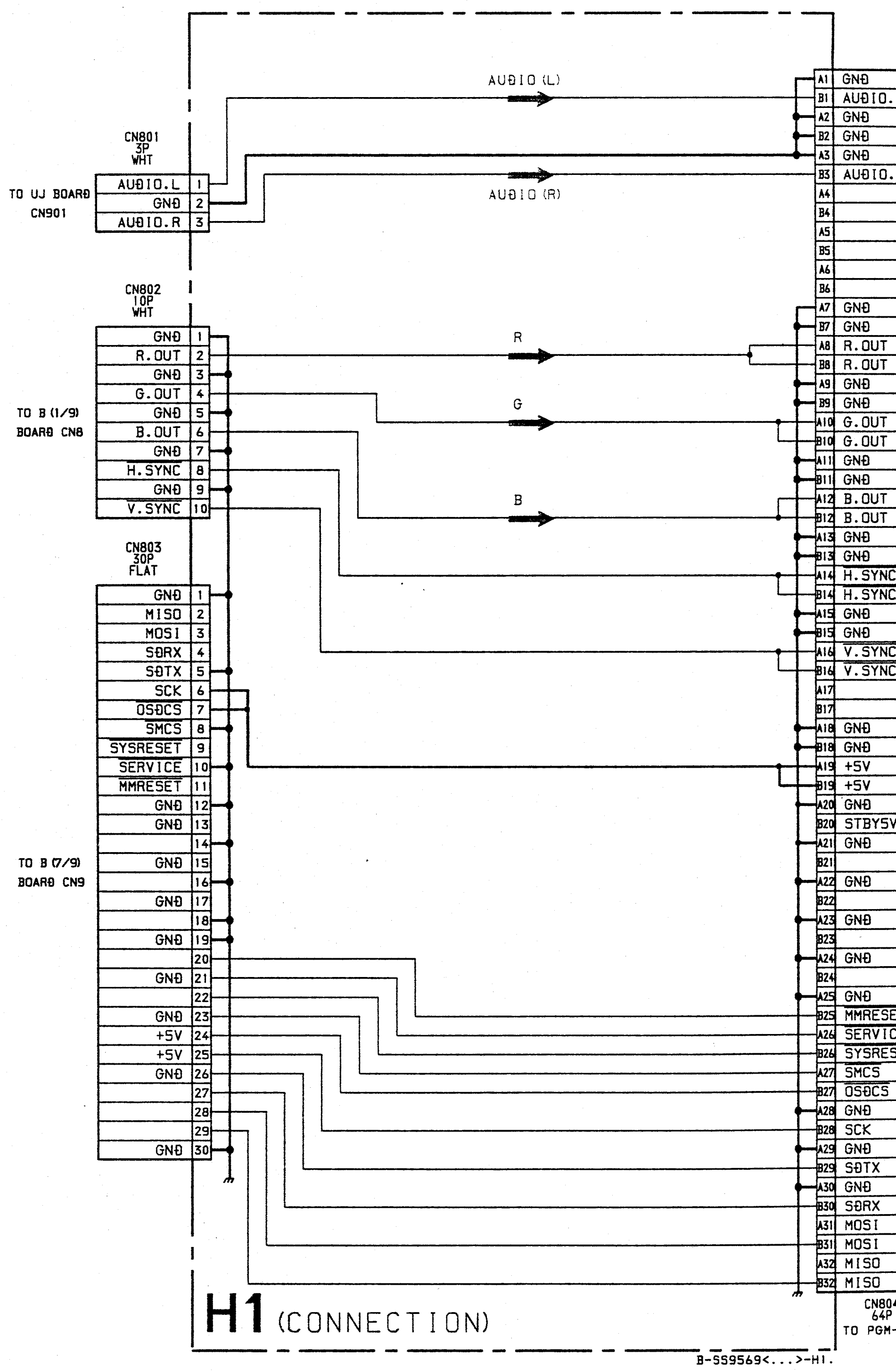
UJ (SIGNAL IN, INPUT SELECT)

UJ BOARD

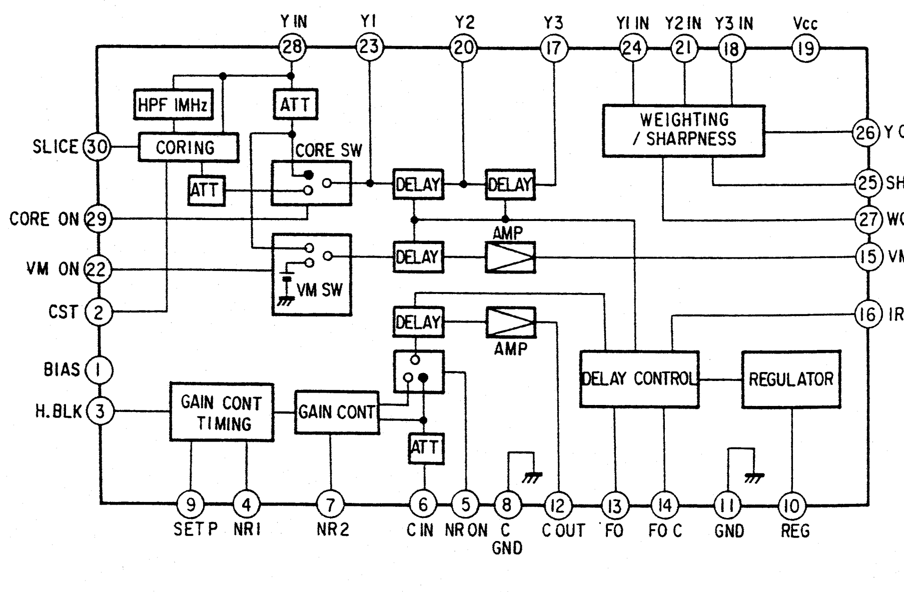

①
0.7Vp-p (H)
④
2.0Vp-p (V)


IC901 MM1114XFBE VIDEO SW
IN1 GND SW1 OUT IN2 5V SW2 IN3
IC902 MM1114XFBE Y SW
D999 TLG124A SET POWER LED
R975 330 :CHIP
5V
12V
Q904 DTC144EKA INPUT SELECT SW
2.7 IC904 MM1113XFBE AUDIO (R) SW
Q901 DTA144EKA VIDEO MUTE SW
Q902 DTA144EKA VIDEO MUTE SW
Q903 DTA144EKA VIDEO MUTE SW
AUDIO (L)
AUDIO (R)
CN901 3P WHT:L
1 L.OUT
2 GND
3 R.OUT
TO H1 BOARD CN801
CN902 15P :BTOB
15 12V
14 GND
13 VIDEO
12 GND
11 Y.OUT
10 GND
9 C.OUT
8 GND
7 VIDEO/RGB
6 RGB1/RGB2
5 NC
4 NC
3 V.SYNC
2 SDA
1 SCL
TO B (2/9) BOARD CN1
CN903 10P :BTOB
10 5V
9 GND
8 R-Y/R
7 GND
6 Y/G
5 GND
4 B-Y/B
3 H/HV
2 V
1 GND
TO B (2/9) BOARD CN2
R
G
B
Q910 Q911 Q912 Q913 Q914 Q915 Q916 Q917
D991 D992 D993 D994
B-SS9569<...>-UJ.

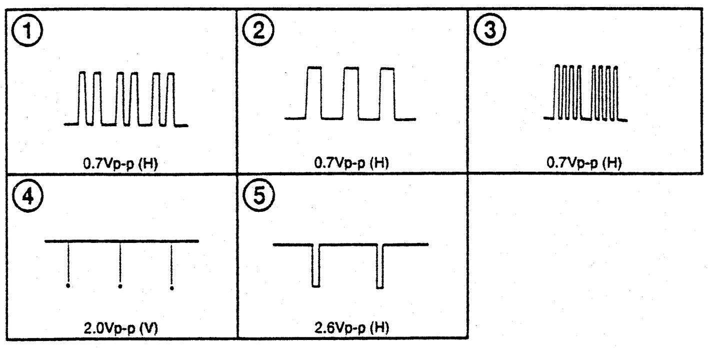

IC1001 NJM78L09UA 9V REG
Q1001 2SA1037AK BUFF
+12V 5
GND 4
GND 3
Y.OUT 2
Y.IN 1
CN1001 5P B TO B TO B (2/9) BOARD CN10
GND 5
GND 4
GND 3
GND 2
GND 1
CN1002 5P B TO B TO B (2/9) BOARD CN11
IC1002 CXA1387S APERTURE
9V
B1 (APERTURE)
B-SS9569<...

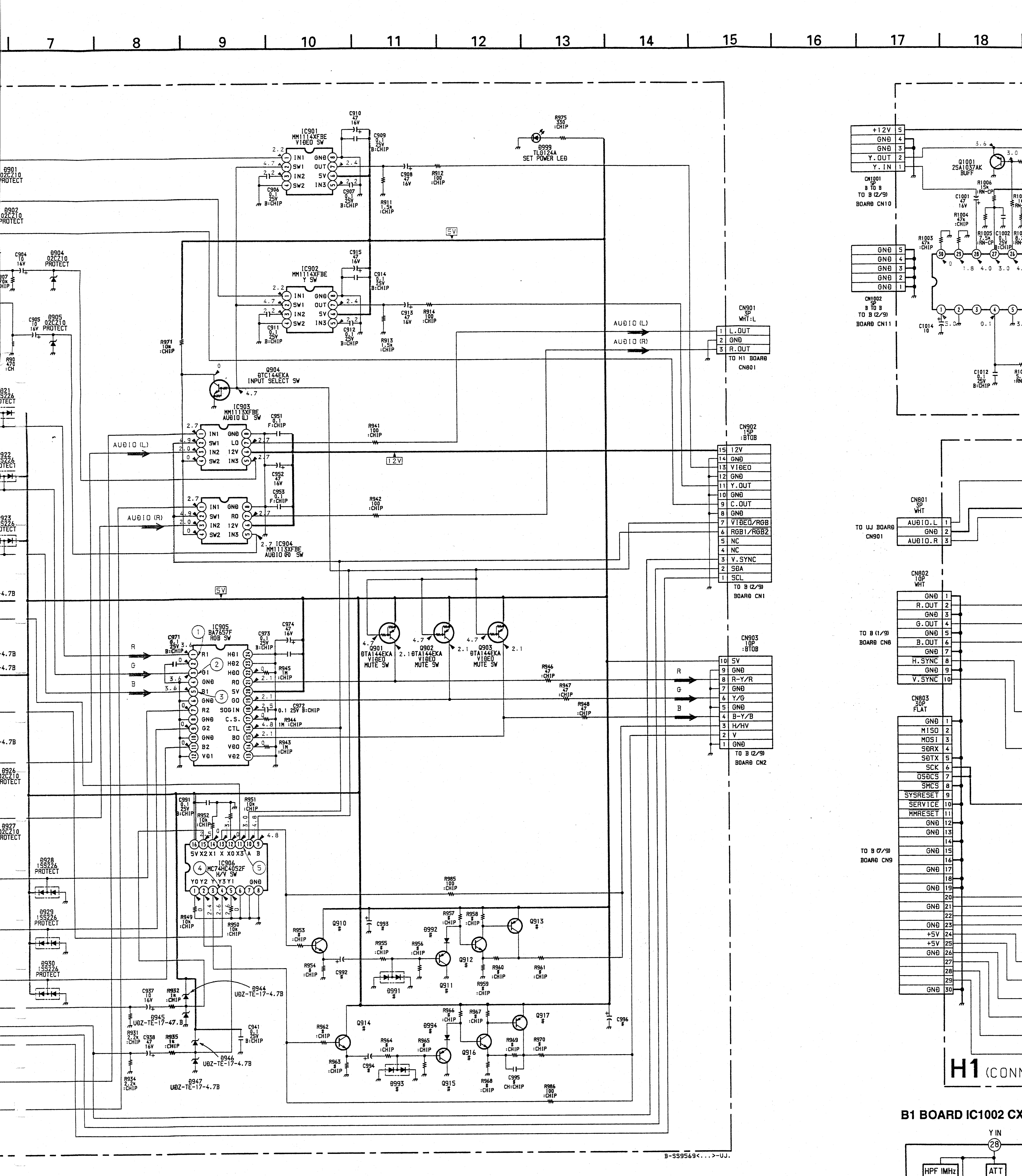

AUDIO (L)
AUDIO (R)
R
G
B
CN801 3P WHT
TO UJ BOARD CN901
AUDIO.L 1
GND 2
AUDIO.R 3
CN802 10P WHT
TO B (1/9) BOARD CN8
GND 1
R.OUT 2
GND 3
G.OUT 4
GND 5
B.OUT 6
GND 7
H.SYNC 8
GND 9
V.SYNC 10
CN803 30P FLAT
TO B (7/9) BOARD CN9
GND 1
MISO 2
MOSI 3
SDRX 4
SDTX 5
SCK 6
DSDCS 7
SMCS 8
SYSRESET 9
SERVICE 10
MMRESET 11
GND 12
GND 13
GND 15
GND 17
GND 19
GND 21
GND 23
+5V 24
+5V 25
GND 26
GND 30
A1 GND
B1 AUDIO.
A2 GND
B2 GND
A3 GND
B3 AUDIO.
A7 GND
B7 GND
A8 R.OUT
B8 R.OUT
A9 GND
B9 GND
A10 G.OUT
B10 G.OUT
A11 GND
B11 GND
A12 B.OUT
B12 B.OUT
A13 GND
B13 GND
A14 H.SYNC
B14 H.SYNC
A15 GND
B15 GND
A16 V.SYNC
B16 V.SYNC
A18 GND
B18 GND
A19 +5V
B19 +5V
A20 GND
B20 STBY5V
A21 GND
A22 GND
A23 GND
A24 GND
A25 GND
B25 MMRESE
A26 SERVIC
B26 SYSRES
A27 SMCS
B27 DSDCS
A28 GND
B28 SCK
A29 GND
B29 SDTX
A30 GND
B30 SDRX
A31 MOSI
B31 MOSI
A32 MISO
B32 MISO
CN804 64P
TO PGM-
H1 (CONNECTION)
B-SS9569<...>-H1.

B1 BOARD IC1002 CXA1387S

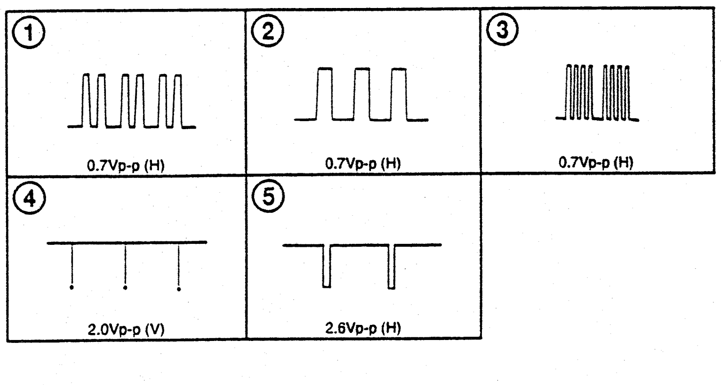

Y IN 28
Y1 23
Y2 20
Y3 17
Y1 IN 24
Y2 IN 21
Y3 IN 18
Vcc 19
HPF 1MHz
ATT
CORING
CORE SW
DELAY
WEIGHTING / SHARPNESS
AMP
VM SW
GAIN CONT TIMING
GAIN CONT
DELAY CONTROL
REGULATOR
SLICE 30
CORE ON 29
VM ON 22
CST 2
BIAS 1
H.BLK 3
26 Y OUT
25 SHP
27 WGT
15 VM O
16 IREF
9 SET P
4 NR1
7 NR2
6 C IN
5 NR ON
8 C GND
12 C OUT
13 FO
14 FO C
11 GND
10 REG

UJ BOARD

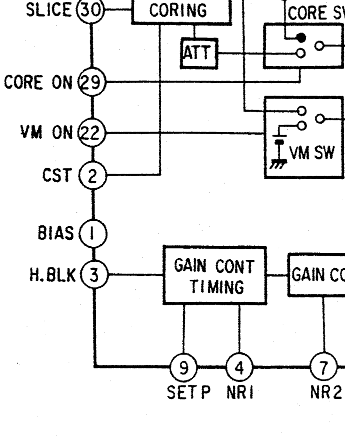

①
0.7Vp-p (H)
②
0.7Vp-p (H)
③
0.7Vp-p (H)
④
2.0Vp-p (V)
⑤
2.6Vp-p (H)

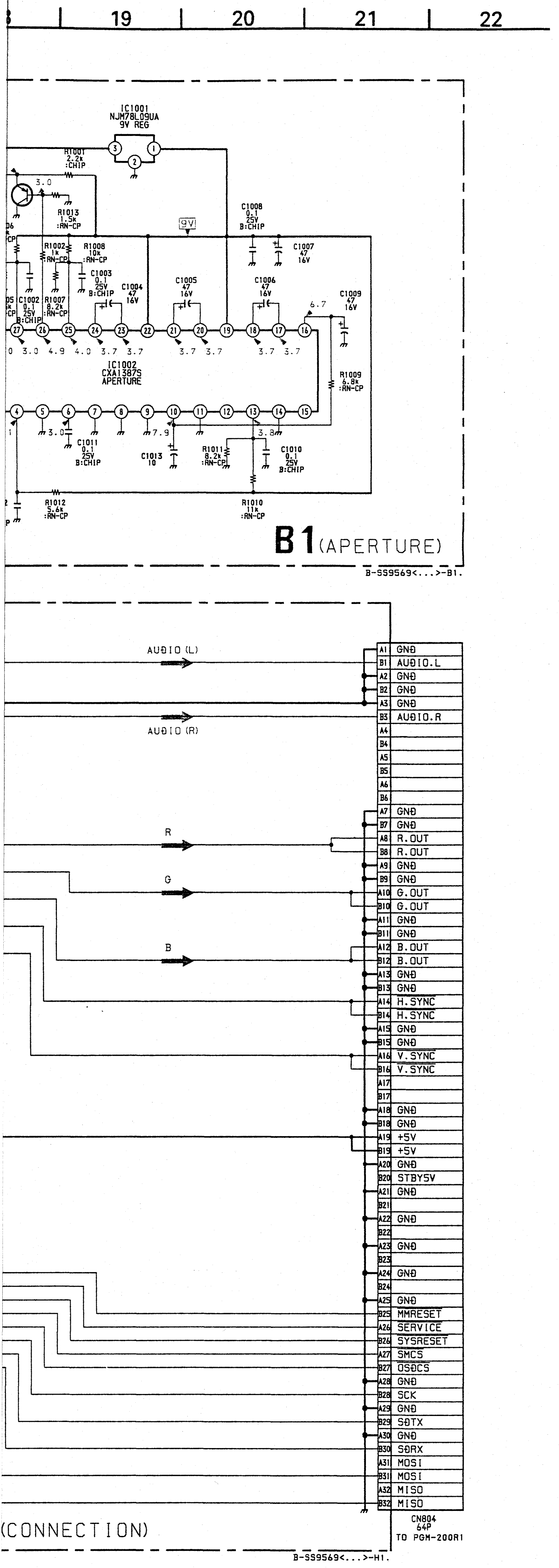

7
8
9
10
11
12
13
14
15
16
17
18
IC901 MM1114XFBE VIDEO SW
IC902 MM1114XFBE Y SW
IC903 MM1113XFBE AUDIO (L) SW
IC904 MM1113XFBE AUDIO (R) SW
IC905 BA7657F RGB SW
IC906 MC74HC4052F H/V SW
D999 TLG124A SET POWER LED
R975 330 :CHIP
Q904 DTC144EKA INPUT SELECT SW
Q901 DTA144EKA VIDEO MUTE SW
Q902 DTA144EKA VIDEO MUTE SW
Q903 DTA144EKA VIDEO MUTE SW
D901 02CZ10 PROTECT
D902 02CZ10 PROTECT
D904 02CZ10 PROTECT
D905 02CZ10 PROTECT
D922 1SS226 PROTECT
D923 1SS226 PROTECT
D926 02CZ10 PROTECT
D927 02CZ10 PROTECT
D928 1SS226 PROTECT
D929 1SS226 PROTECT
D930 1SS226 PROTECT
D944 UDZ-TE-17-4.7B
D945 UDZ-TE-17-47.B
D946 UDZ-TE-17-4.7B
D947 UDZ-TE-17-4.7B
5V
12V
AUDIO (L)
AUDIO (R)
R
G
B
CN901 3P WHT:L
L.OUT
GND
R.OUT
TO H1 BOARD CN801
CN902 15P :BTOB
12V
GND
VIDEO
GND
Y.OUT
GND
C.OUT
GND
VIDEO/RGB
RGB1/RGB2
NC
NC
V.SYNC
SDA
SCL
TO B (2/9) BOARD CN1
CN903 10P :BTOB
5V
GND
R-Y/R
GND
Y/G
GND
B-Y/B
H/HV
V
GND
TO B (2/9) BOARD CN2
CN1001 5P B TO B
+12V
GND
GND
Y.OUT
Y.IN
TO B (2/9) BOARD CN10
Q1001 2SA1037AK BUFF
CN1002 5P B TO B
TO B (2/9) BOARD CN11
CN801 3P WHT
AUDIO.L
GND
AUDIO.R
TO UJ BOARD CN901
CN802 10P WHT
GND
R.OUT
GND
G.OUT
GND
B.OUT
GND
H.SYNC
GND
V.SYNC
TO B (1/9) BOARD CN8
CN803 30P FLAT
GND
MISO
MOSI
SDRX
SDTX
SCK
OSDCS
SMCS
SYSRESET
SERVICE
MMRESET
GND
GND
GND
GND
GND
GND
GND
+5V
+5V
GND
GND
TO B (7/9) BOARD CN9
H1 (CONN
B-SS9569<...>-UJ.

UJ BOARD

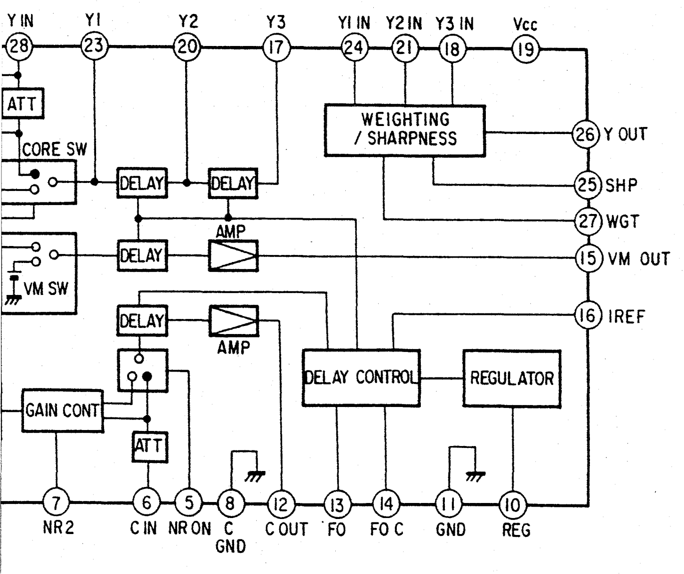


B1 BOARD IC1002 CX


Y IN
28
HPF 1MHz
ATT
SLICE 30
CORING
ATT
CORE SW
CORE ON 29
VM ON 22
VM SW
CST 2
BIAS 1
H.BLK 3
GAIN CONT TIMING
GAIN CO
9 SETP
4 NR1
7 NR2


19
20
21
22
IC1001
NJM78L09UA
9V REG
R1001 2.2k :CHIP
R1013 1.5k :RN-CP
C1008 0.1 25V B:CHIP
C1007 47 16V
R1002 1k :RN-CP
R1008 10k :RN-CP
C1003 0.1 25V B:CHIP
C1004 47 16V
C1005 47 16V
C1006 47 16V
C1009 47 16V
C1002 0.1 25V B:CHIP
R1007 8.2k :RN-CP
IC1002
CXA1387S
APERTURE
R1009 6.8k :RN-CP
C1011 0.1 25V B:CHIP
C1013 10
R1011 8.2k :RN-CP
C1010 0.1 25V B:CHIP
R1012 5.6k :RN-CP
R1010 11k :RN-CP
B1(APERTURE)
B-SS9569<...>-B1.
AUDIO (L)
AUDIO (R)
R
G
B
A1 GND
B1 AUDIO.L
A2 GND
B2 GND
A3 GND
B3 AUDIO.R
A4
B4
A5
B5
A6
B6
A7 GND
B7 GND
A8 R.OUT
B8 R.OUT
A9 GND
B9 GND
A10 G.OUT
B10 G.OUT
A11 GND
B11 GND
A12 B.OUT
B12 B.OUT
A13 GND
B13 GND
A14 H.SYNC
B14 H.SYNC
A15 GND
B15 GND
A16 V.SYNC
B16 V.SYNC
A17
B17
A18 GND
B18 GND
A19 +5V
B19 +5V
A20 GND
B20 STBY5V
A21 GND
B21
A22 GND
B22
A23 GND
B23
A24 GND
B24
A25 GND
B25 MMRESET
A26 SERVICE
B26 SYSRESET
A27 SMCS
B27 OSDCS
A28 GND
B28 SCK
A29 GND
B29 SDTX
A30 GND
B30 SDRX
A31 MOSI
B31 MOSI
A32 MISO
B32 MISO
CN804 64P TO PGM-200R1
(CONNECTION)
B-SS9569<...>-H1.

002 CXA1387S

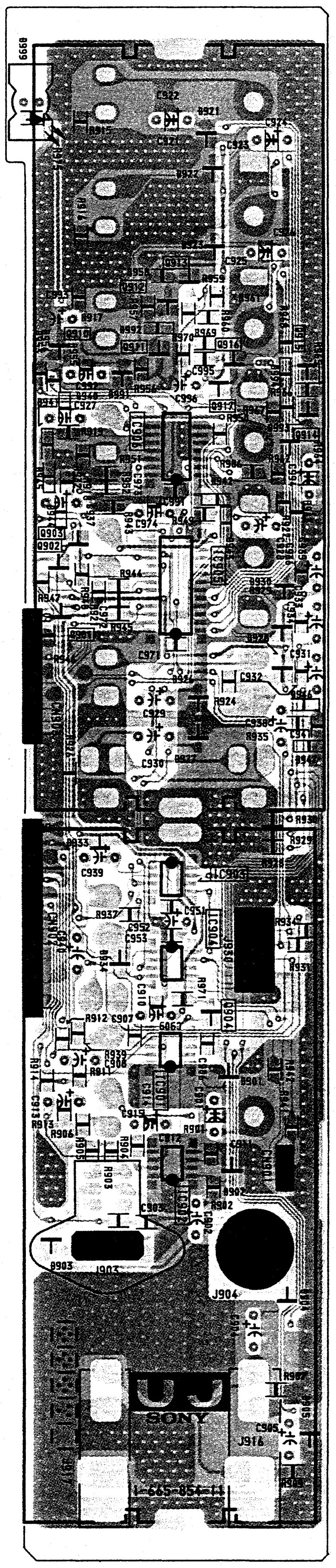

Y IN
YI
Y2
Y3
YI IN
Y2 IN
Y3 IN
Vcc
ATT
CORE SW
DELAY
DELAY
AMP
DELAY
VM SW
DELAY
AMP
GAIN CONT
ATT
WEIGHTING / SHARPNESS
DELAY CONTROL
REGULATOR
Y OUT
SHP
WGT
VM OUT
IREF
NR2
C IN
NR ON
C GND
C OUT
FO
FO C
GND
REG

UJ [SIGNAL IN, INPUT SELECT]

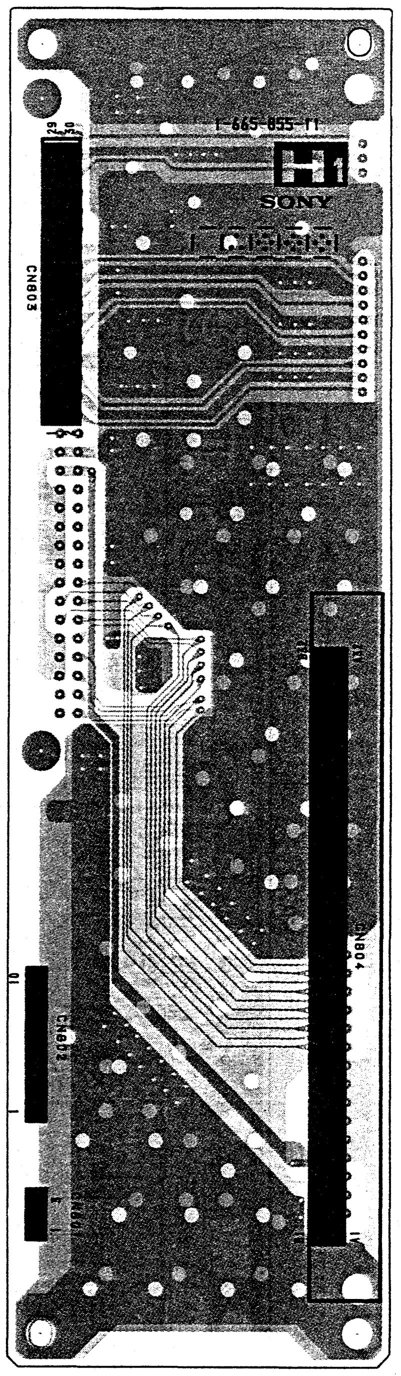
H1 [CONNECTION]

B1 [APERTURE]

– UJ BOARD –

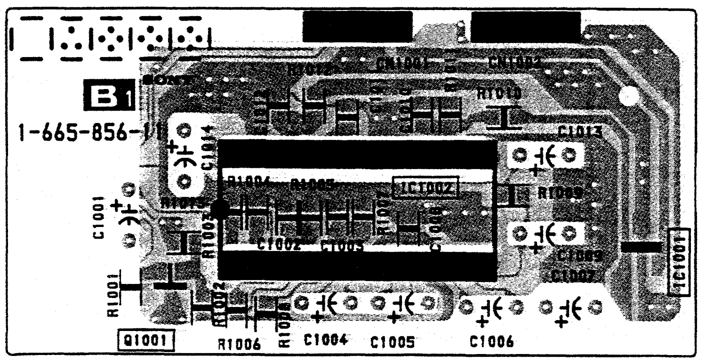


– H1 BOARD –



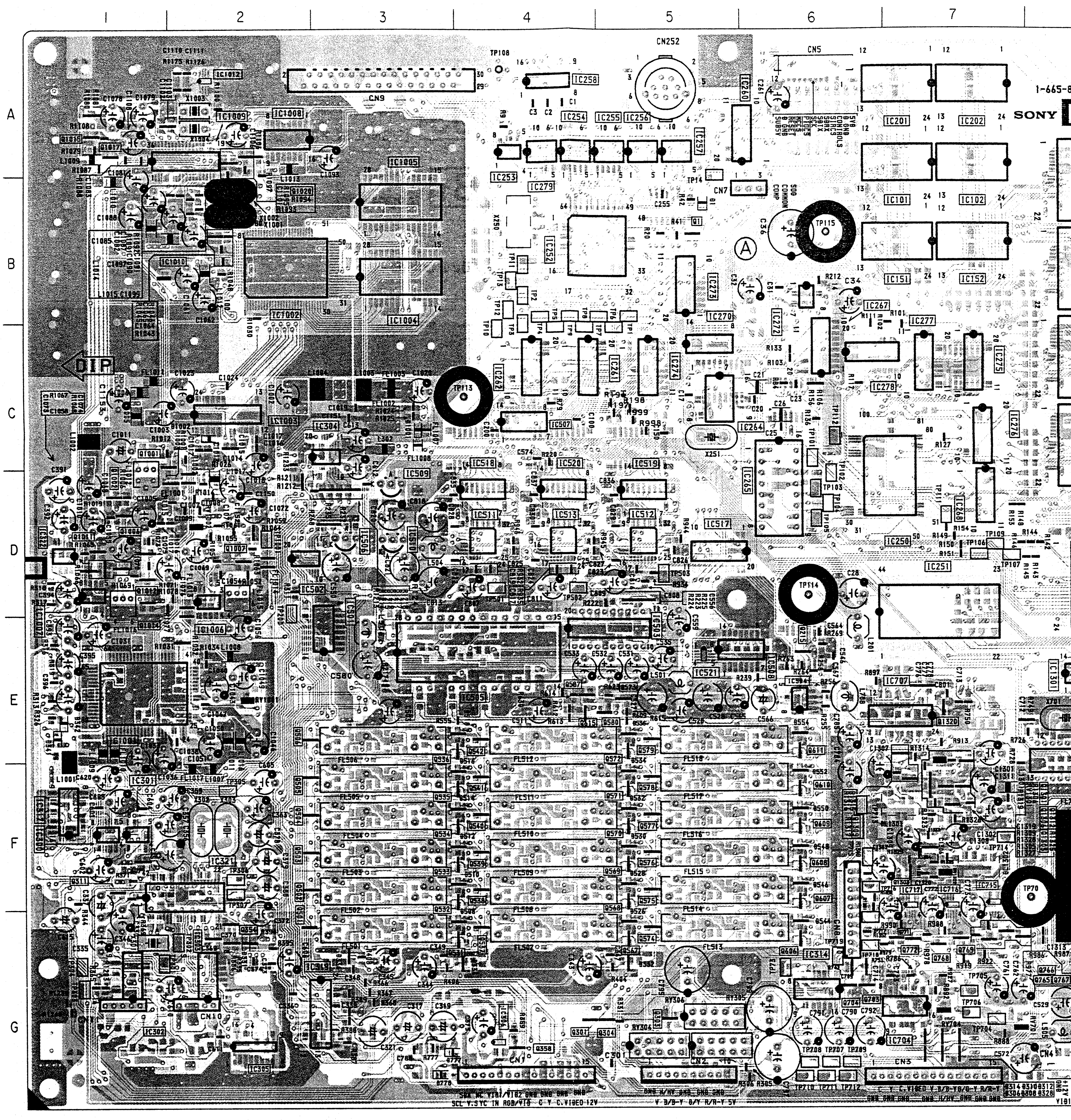
- : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.

– B1 BOARD –


B1
1-665-856-11
CN1001
CN1002
R1010
C1013
C1014
C1001
R1001
R1004
R1005
IC1002
R1009
C1002
C1003
C1009
C1007
IC1001
Q1001
R1006
C1004
C1005
C1006

– **B BOARD** – <Component Side>

B [SCAN CONVERTER]

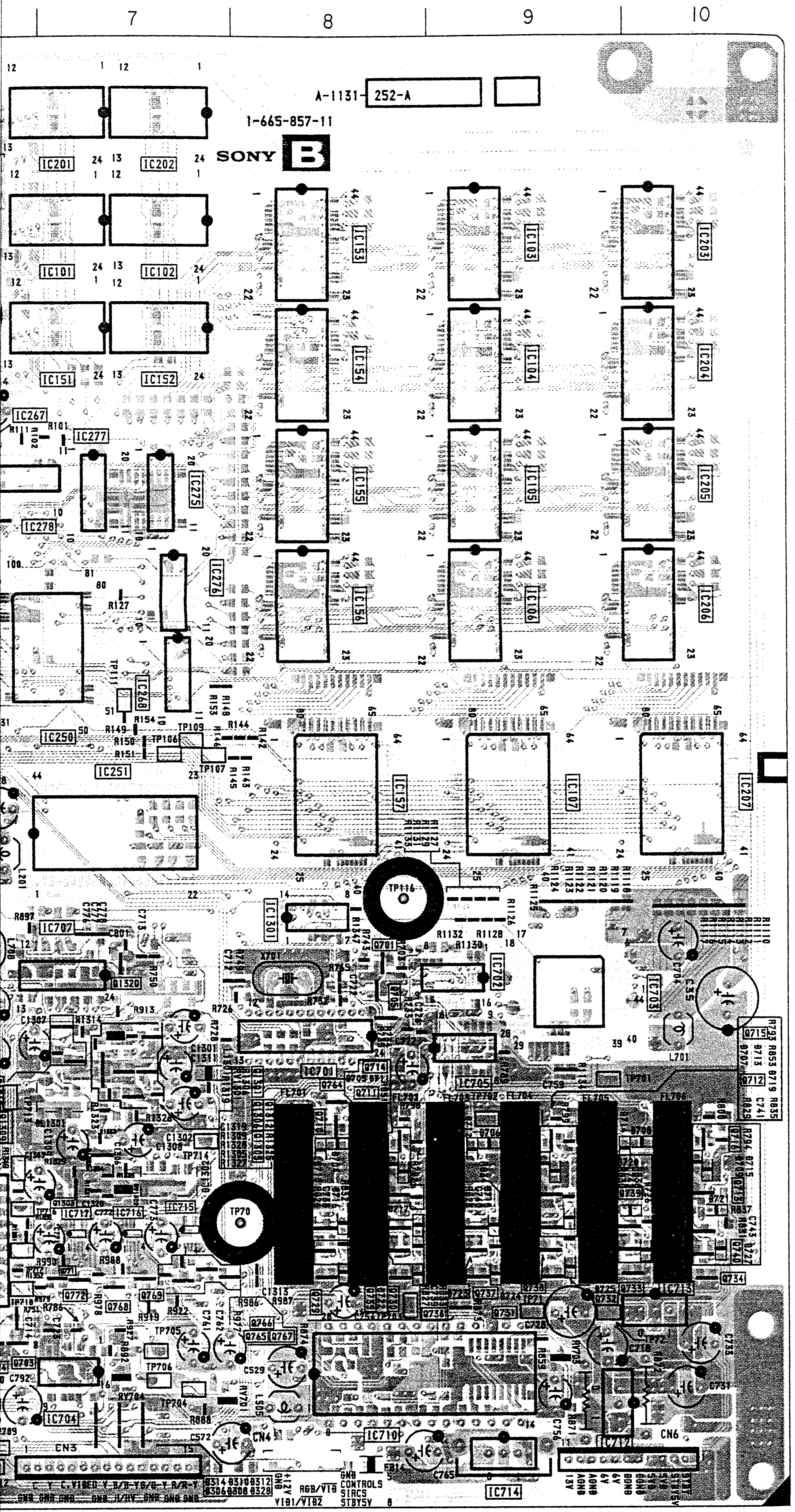


B BOARD
(COMPONENT SIDE)

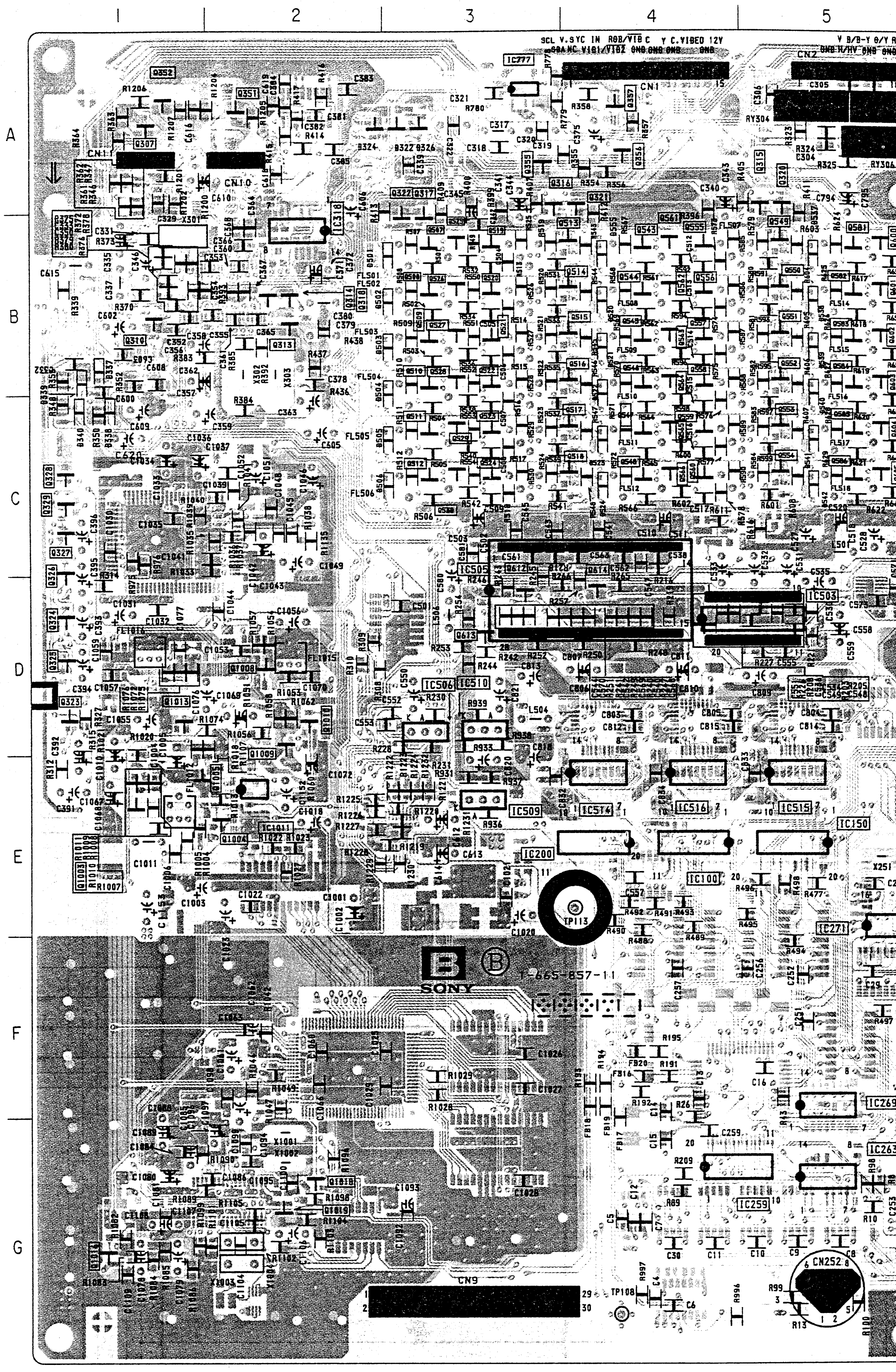
IC	
IC101	A–7
IC102	A–7
IC103	A–9
IC104	B–10
IC105	C–9
IC106	C–9
IC107	D–9
IC151	B–7
IC152	B–7
IC153	A–8
IC154	B–8
IC155	C–8
IC156	C–8
IC157	D–8
IC201	A–7
IC202	A–7
IC203	A–10
IC204	B–10
IC205	C–10
IC206	C–10
IC207	D–10
IC250	D–7
IC251	D–7
IC252	B–4
IC253	A–4
IC254	A–4
IC255	A–5
IC256	A–5
IC257	A–5
IC258	A–4
IC260	A–6
IC261	C–4
IC262	C–4
IC264	C–5
IC265	D–6
IC267	C–6
IC268	D–7
IC270	C–5
IC272	B–6
IC273	B–5
IC274	C–5
IC275	C–7
IC276	C–7
IC277	C–7
IC278	C–6
IC279	A–4
IC300	F–1
IC301	F–1
IC302	G–1
IC303	G–2
IC304	C–3
IC305	G–2
IC306	G–4
IC317	F–1
IC319	G–3
IC321	F–2
IC501	E–3
IC502	D–2
IC503	E–5
IC504	E–6
IC505	E–4
IC507	C–4
IC508	E–6
IC509	D–3
IC510	D–3
IC511	D–4
IC512	D–5
IC513	D–4
IC517	D–5
IC518	D–4
IC519	D–7
IC520	D
IC521	E
IC703	E
IC710	G
IC712	G
IC713	G
IC714	G
IC1001	E
IC1002	B
IC1003	C
IC1004	B
IC1005	B
IC1006	D
IC1007	D
IC1008	A
IC1009	A
IC1010	B
IC1012	A

TRANSIST	
Q1	B
Q215	E
Q311	F
Q354	G
Q358	G
Q501	G
Q502	F
Q503	F
Q504	F
Q505	F
Q506	F
Q531	G
Q532	F
Q533	F
Q534	F
Q535	F

Schematic diagrams
← B1, H1, UJ **boards**


7
8
9
10
A-1131-252-A
1-665-857-11
SONY B
IC201
IC202
IC101
IC102
IC151
IC152
IC153
IC154
IC155
IC156
IC103
IC104
IC105
IC106
IC203
IC204
IC205
IC206
IC157
IC107
IC207
TP116
TP70
CN3
CN4
CN6
IC714
RGB/VIB
VIB1/VIB2
CONTROLS
SIRCS
STBY5V

<Conductor Side>


1
2
3
4
5
A
B
C
D
E
F
G
CN1
CN2
CN9
CN252
IC505
IC503
IC506
IC510
IC509
IC514
IC516
IC515
IC150
IC100
IC200
IC271
IC259
IC263
TP113
TP108
B
1-665-857-11
SONY

NT SIDE)

	–7
	–7
	–9
	–10
	–9
	–9
	–9
	–7
	–7
	–8
	–8
	–8
	–8
	–8
	–7
	–7
	–10
	–10
	–10
	–10
	–10
	–7
	–7
	–4
	–4
	–4
	–5
	–5
	–5
	–4
	–6
	–4
	–4
	–5
IC265	D–6
IC267	C–6
IC268	D–7
IC270	C–5
IC272	B–6
IC273	B–5
IC274	C–5
IC275	C–7
IC276	C–7
IC277	C–7
IC278	C–6
IC279	A–4
IC300	F–1
IC301	F–1
IC302	G–1
IC303	G–2
IC304	C–3
IC305	G–2
IC306	G–4
IC317	F–1
IC319	G–3
IC321	F–2
IC501	E–3
IC502	D–2
IC503	E–5
IC504	E–6
IC505	E–4
IC507	C–4
IC508	E–6
IC509	D–3
IC510	D–3
IC511	D–4
IC512	D–5
IC513	D–4
IC517	D–5
IC518	D–4
IC519	D–7
IC520	D–4
IC521	E–5
IC703	E–9
IC710	G–8
IC712	G–9
IC713	G–10
IC714	G–9
IC1001	E–1
IC1002	B–2
IC1003	C–2
IC1004	B–3
IC1005	B–3
IC1006	D–2
IC1007	D–1
IC1008	A–2
IC1009	A–2
IC1010	B–1
IC1012	A–2

TRANSISTOR	
Q1	B–5
Q215	E–6
Q311	F–1
Q354	G–2
Q358	G–4
Q501	G–2
Q502	F–2
Q503	F–2
Q504	F–2
Q505	F–2
Q506	F–2
Q531	G–1
Q532	F–3
Q533	F–3
Q534	F–3
Q535	F–3
Q536	E–3
Q537	G–4
Q538	F–4
Q539	F–4
Q540	F–4
Q541	F–4
Q542	E–4
Q567	G–5
Q568	F–5
Q569	F–5
Q570	F–5
Q571	F–5
Q572	E–5
Q573	E–5
Q574	G–5
Q575	F–5
Q576	F–5
Q577	F–5
Q578	F–5
Q579	F–5
Q580	E–5
Q587	E–4
Q606	G–6
Q607	F–6
Q608	F–6
Q609	F–6
Q610	F–6
Q611	E–6
Q615	E–4
Q711	F–8
Q712	F–9
Q713	F–10
Q714	F–8
Q715	F–9
Q716	F–10
Q729	G–8
Q731	G–9
Q733	G–10
Q735	G–8
Q737	G–9
Q739	G–10
Q1001	C–1
Q1002	D–1
Q1006	D–1
Q1007	D–2
Q1011	D–1
Q1012	D–1
Q1014	D–1
Q1015	A–1
Q1017	A–1
Q1020	A–2

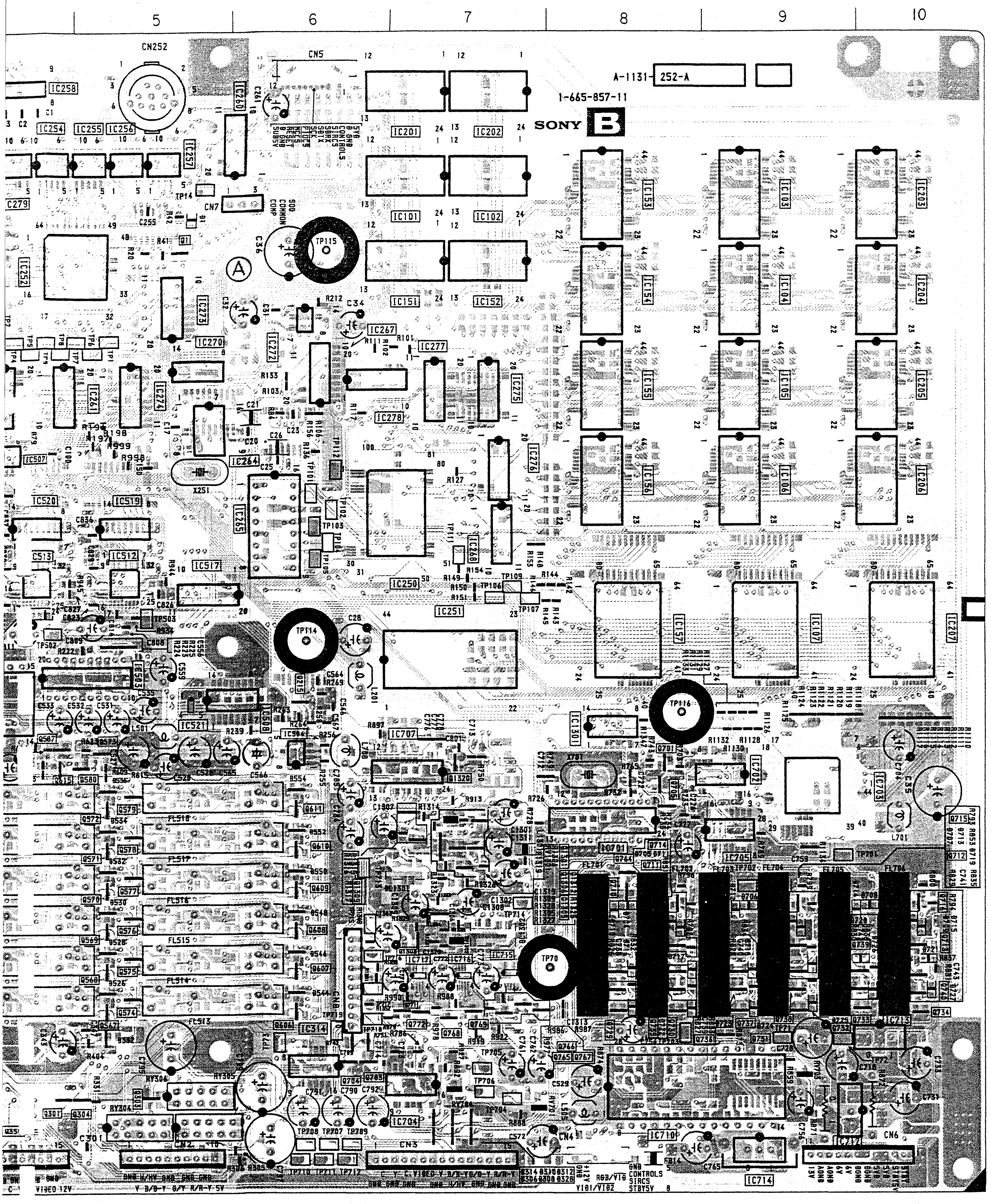
DIODE	
D1	B–5
D331	G–2
D332	G–5
D334	G–4
D336	G–3
D508	G–4
D510	F–4
D512	F–4
D514	F–4
D516	F–4
D518	E–4
D526	G–5
D528	F–5
D530	F–5
D532	F–5
D534	F–5
D536	E–5
D544	G–6
D546	F–6
D548	F–6
D550	F–6
D552	F–6
D554	E–6
D704	F–8
D706	F–9
D708	F–10
D710	F–8
D712	F–9
D714	F–10
D716	F–8
D718	F–10
D720	F–9
D722	G–8
D724	G–9
D726	G–10
D777	G–3
D778	G–3
D1001	C–3
D1002	C–2

B BOARD (CONDUCTOR SIDE)

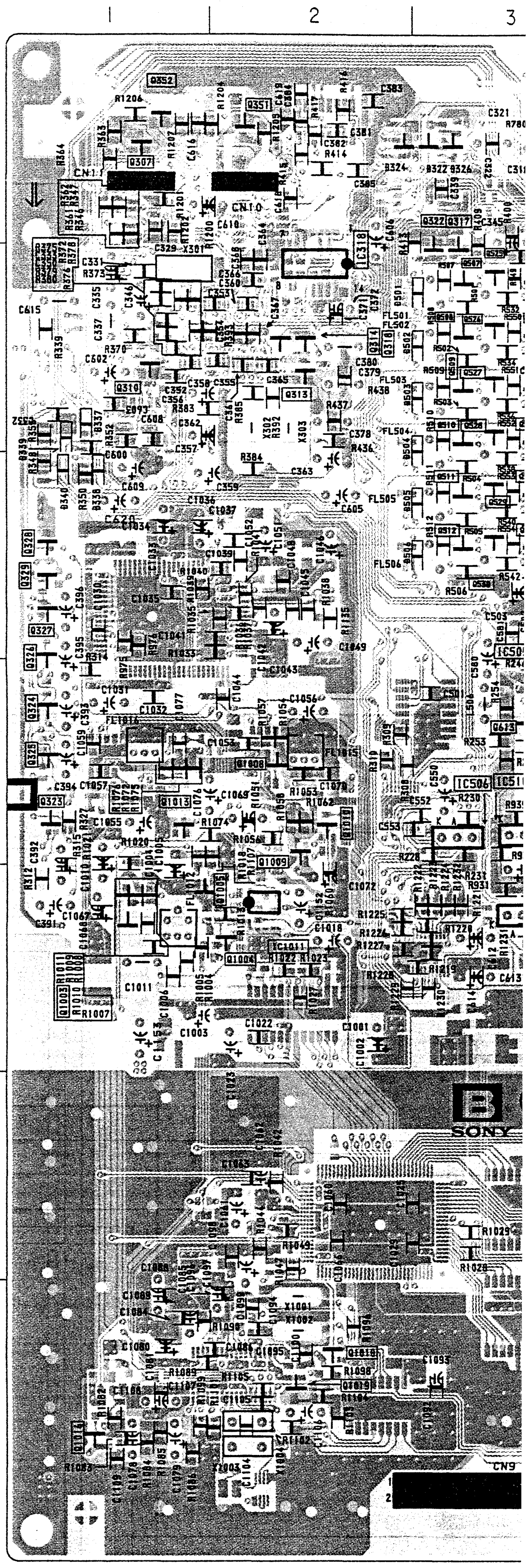
IC	
IC100	E–4
IC108	D–9
IC150	E–5
IC158	D–8
IC200	E–4
IC208	D–10
IC259	G–5
IC263	G–5
IC265	E–6
IC266	E–6
IC269	F–5
IC271	E–5
IC280	F–7
IC318	B–2
IC503	D–5
IC505	D–4
IC509	E–3
IC510	D–3
IC514	E–4
IC515	E–5
IC516	E–4
IC522	D–6
IC710	A–8
IC712	A–9
IC713	A–10
IC714	A–9
IC777	A–3
IC1011	E–2

TRANSISTOR	
Q307	A–1
Q310	B–1
Q313	B–2
Q314	B–2
Q315	A–5
Q316	A–3
Q317	A–3
Q318	B–2
Q320	A–5
Q321	A–4
Q322	A–3
Q351	A–2
Q352	A–1
Q355	A–3
Q356	A–4
Q357	A–4
Q507	B–3
Q508	B–3
Q509	B–3
Q510	B–3
Q511	C–3
Q512	C–3
Q513	B–4
Q514	B–4
Q515	B–4
Q516	B–4
Q517	C–4
Q518	C–4
Q519	B–3
Q520	B–3
Q521	B–3
Q522	B–3
Q523	C–3
Q524	C–3
Q525	B–3
Q526	B–3
Q527	B–3
Q528	B–3
Q529	C–3
Q530	C–3
Q543	B–4
Q544	B–4
Q545	B–4
Q546	B–4
Q547	C–4
Q548	C–4
Q549	B–5
Q550	B–5
Q551	B–5
Q552	B–5
Q553	C–5
Q554	C–5
Q555	B–4
Q556	B–4
Q557	B–4
Q558	B–4
Q559	C–4
Q560	C–4
Q561	B–4
Q562	B–4
Q563	B–4
Q564	B–4
Q565	C–4
Q566	C–4
Q581	B–5
Q582	B–5
Q583	B–5
Q584	B–5
Q585	C–5
Q586	C–5
Q588	B–6
Q589	B–6
Q590	B–6
Q591	B–6
Q592	C–6
Q593	C–6
Q594	B–5
Q595	B–5
Q596	B–5
Q597	B–5
Q598	C–5
Q599	C–5
Q600	B–5
Q601	B–5
Q602	B–5
Q603	B–5
Q604	C–5
Q605	C–5
Q612	D–3
Q613	D–3
Q614	D–4
Q616	C–6
Q723	B–8
Q725	B–9
Q727	B–9
Q747	B–8
Q748	B–9
Q749	B–10
Q753	A–8
Q754	A–8
Q755	A–8
Q1003	E–1
Q1004	E–2
Q1005	E–1
Q1008	D–2
Q1009	D–2
Q1010	D–2
Q1013	D–1
Q1016	G–1
Q1018	G–2
Q1019	G–2

DIODE	
D16	G–6
D17	G–6
D18	G–6
D19	G–6
D20	G–6
D21	G–6
D22	G–6
D23	G–6
D322	A–3
D324	A–2
D326	A–3
D501	B–3
D502	B–3
D503	B–3
D504	B–3
D505	C–3
D506	C–3
D520	B–4
D521	B–4
D522	B–4
D523	C–4
D524	C–4
D537	B–5
D538	B–5
D539	B–5
D540	B–5
D541	C–5
D542	C–5
D555	B–4
D701	B–8
D702	B–9
D703	B–10



<Conductor Side>



B BOARD (COMPONENT SIDE)

IC

IC101	A–7
IC102	A–7
IC103	A–9
IC104	B–10
IC105	C–9
IC106	C–9
IC107	D–9
IC151	B–7
IC152	B–7
IC153	A–8
IC154	B–8
IC155	C–8
IC156	C–8
IC157	D–8
IC201	A–7
IC202	A–7
IC203	A–10
IC204	B–10
IC205	C–10
IC206	C–10
IC207	D–10
IC250	D–7
IC251	D–7
IC252	B–4
IC253	A–4
IC254	A–4
IC255	A–5
IC256	A–5
IC257	A–5
IC258	A–4
IC260	A–6
IC261	C–4
IC262	C–4
IC264	C–5
IC265	D–6
IC267	C–6
IC268	D–7
IC270	C–5
IC272	B–6
IC273	B–5
IC274	C–5
IC275	C–7
IC276	C–7
IC277	C–7
IC278	C–6
IC279	A–4
IC300	F–1
IC301	F–1
IC302	G–1
IC303	G–2
IC304	C–3
IC305	G–2
IC306	G–4
IC317	F–1
IC319	G–3
IC321	F–2
IC501	E–3
IC502	D–2
IC503	E–5
IC504	E–6
IC505	E–4
IC507	C–4
IC508	E–6
IC509	D–3
IC510	D–3
IC511	D–4
IC512	D–5
IC513	D–4
IC517	D–5
IC518	D–4
IC519	D–7
IC520	D–4
IC521	E–5
IC703	E–9
IC710	G–8
IC712	G–9
IC713	G–10
IC714	G–9
IC1001	E–1
IC1002	B–2
IC1003	C–2
IC1004	B–3
IC1005	B–3
IC1006	D–2
IC1007	D–1
IC1008	A–2
IC1009	A–2
IC1010	B–1
IC1012	A–2

TRANSISTOR

Q1	B–5
Q215	E–6
Q311	F–1
Q354	G–2
Q358	G–4
Q501	G–2
Q502	F–2
Q503	F–2
Q504	F–2
Q505	F–2
Q506	F–2
Q531	G–1
Q532	F–3
Q533	F–3
Q534	F–3
Q535	F–3
Q536	E–3
Q537	G–4
Q538	F–4
Q539	F–4
Q540	F–4
Q541	F–4
Q542	E–4
Q567	G–5
Q568	F–5
Q569	F–5
Q570	F–5
Q571	F–5
Q572	E–5
Q573	E–5
Q574	G–5
Q575	F–5
Q576	F–5
Q577	F–5
Q578	F–5
Q579	F–5
Q580	E–5
Q587	E–4
Q606	G–6
Q607	F–6
Q608	F–6
Q609	F–6
Q610	F–6
Q611	E–6
Q615	E–4
Q711	F–8
Q712	F–9
Q713	F–10
Q714	F–8
Q715	F–9
Q716	F–10
Q729	G–8
Q731	G–9
Q733	G–10
Q735	G–8
Q737	G–9
Q739	G–10
Q1001	C–1
Q1002	D–1
Q1006	D–1
Q1007	D–2
Q1011	D–1
Q1012	D–1
Q1014	D–1
Q1015	A–1
Q1017	A–1
Q1020	A–2

DIODE

D1	B–5
D331	G–2
D332	G–5
D334	G–4
D336	G–3
D508	G–4
D510	F–4
D512	F–4
D514	F–4
D516	F–4
D518	E–4
D526	G–5
D528	F–5
D530	F–5
D532	F–5
D534	F–5
D536	E–5
D544	G–6
D546	F–6
D548	F–6
D550	F–6
D552	F–6
D554	E–6
D704	F–8
D706	F–9
D708	F–10
D710	F–8
D712	F–9
D714	F–10
D716	F–8
D718	F–10
D720	F–9
D722	G–8
D724	G–9
D726	G–10
D777	G–3
D778	G–3
D1001	C–3
D1002	C–2

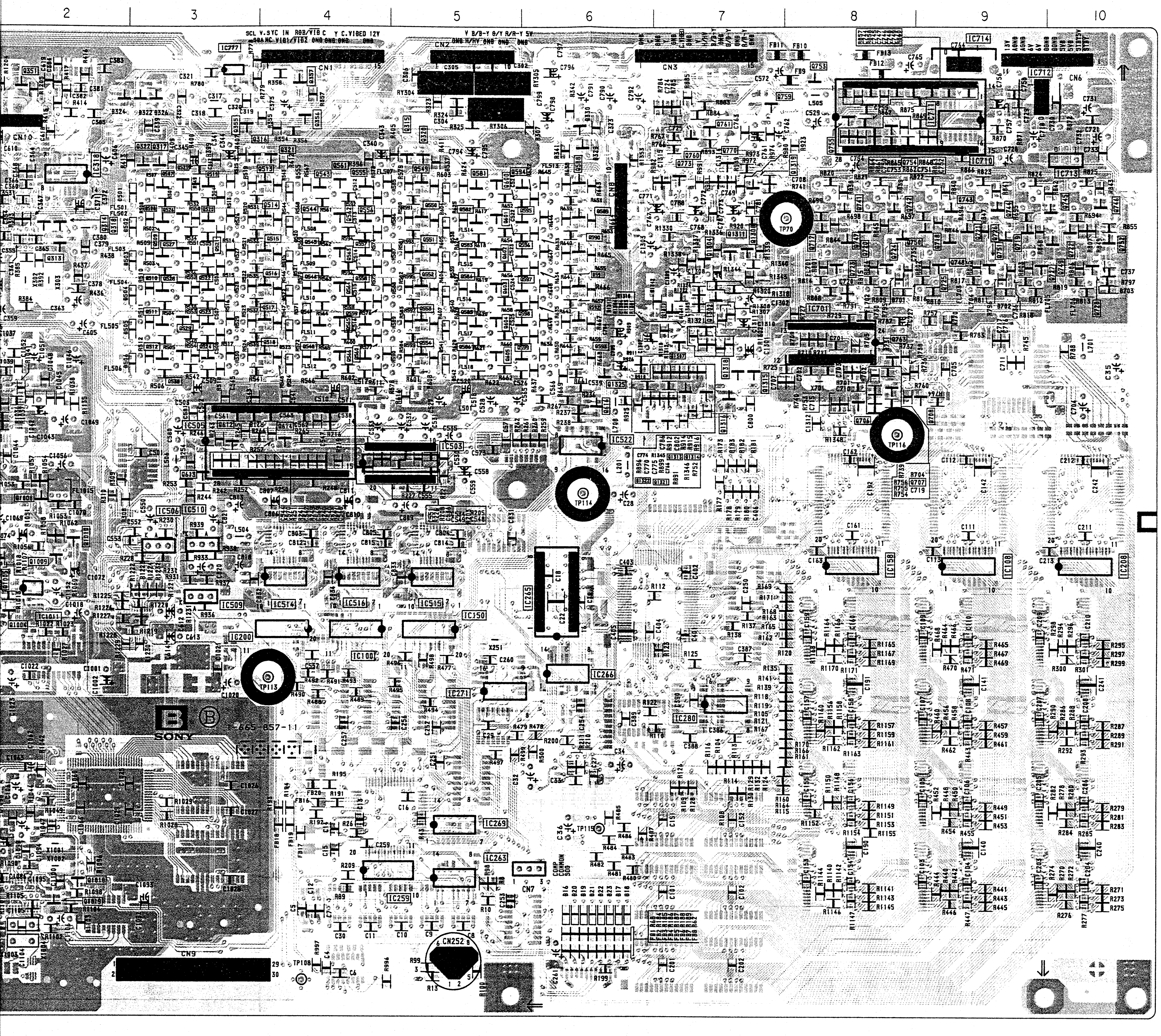
B BOARD (CONDUCTOR SIDE)

IC

IC100	E–4
IC108	D–9
IC150	E–5
IC158	D–8
IC200	E–4
IC208	D–10
IC259	G–5
IC263	G–5
IC265	E–6
IC266	E–6
IC269	F–5
IC271	E–5
IC280	F–7
IC318	B–2
IC503	D–5
IC505	D–4
IC509	E–3
IC510	D–3
IC514	E–4
IC515	E–5
IC516	E–4
IC522	D–6
IC710	A–8
IC712	A–9
IC713	A–10
IC714	A–9
IC777	A–3
IC1011	E–2

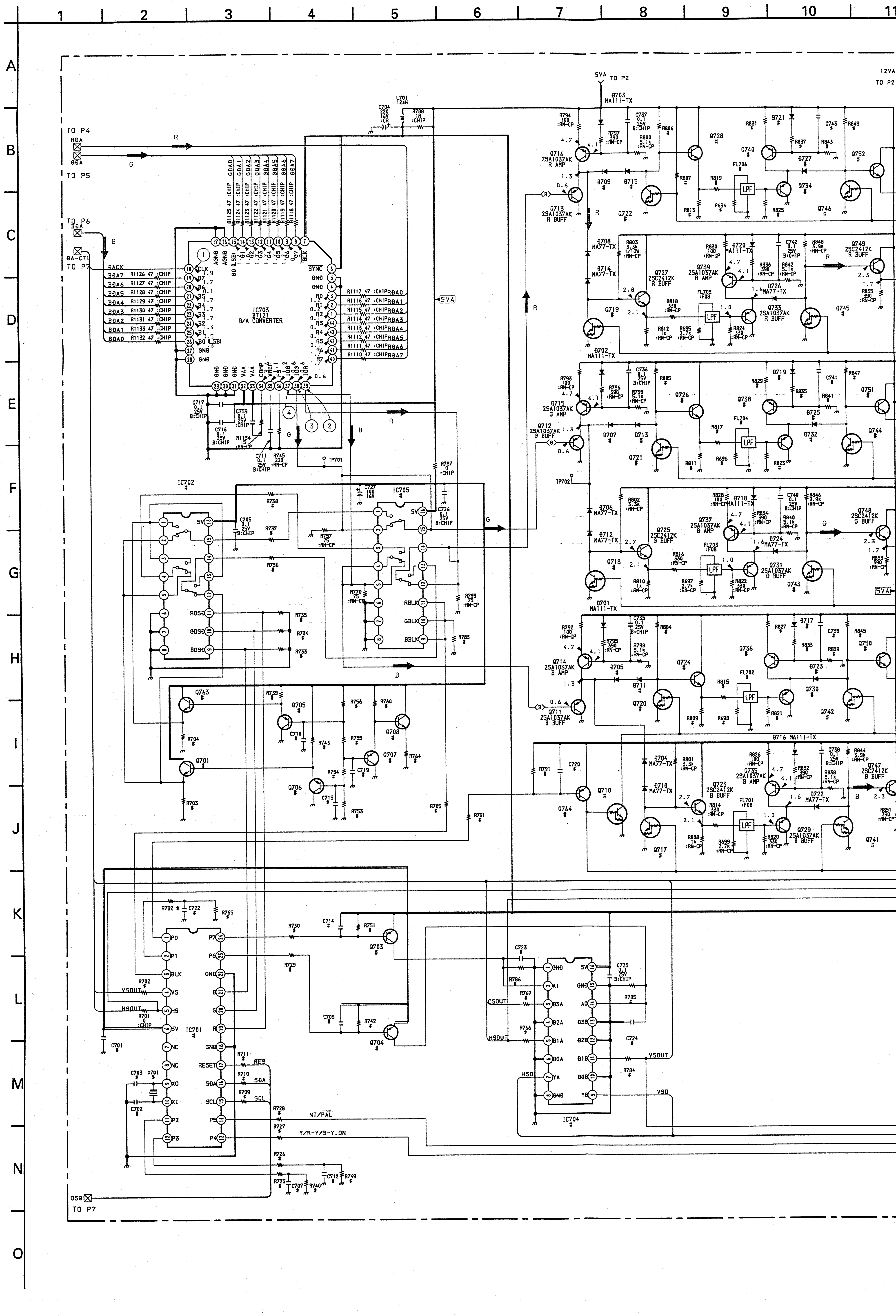
TRANSISTOR

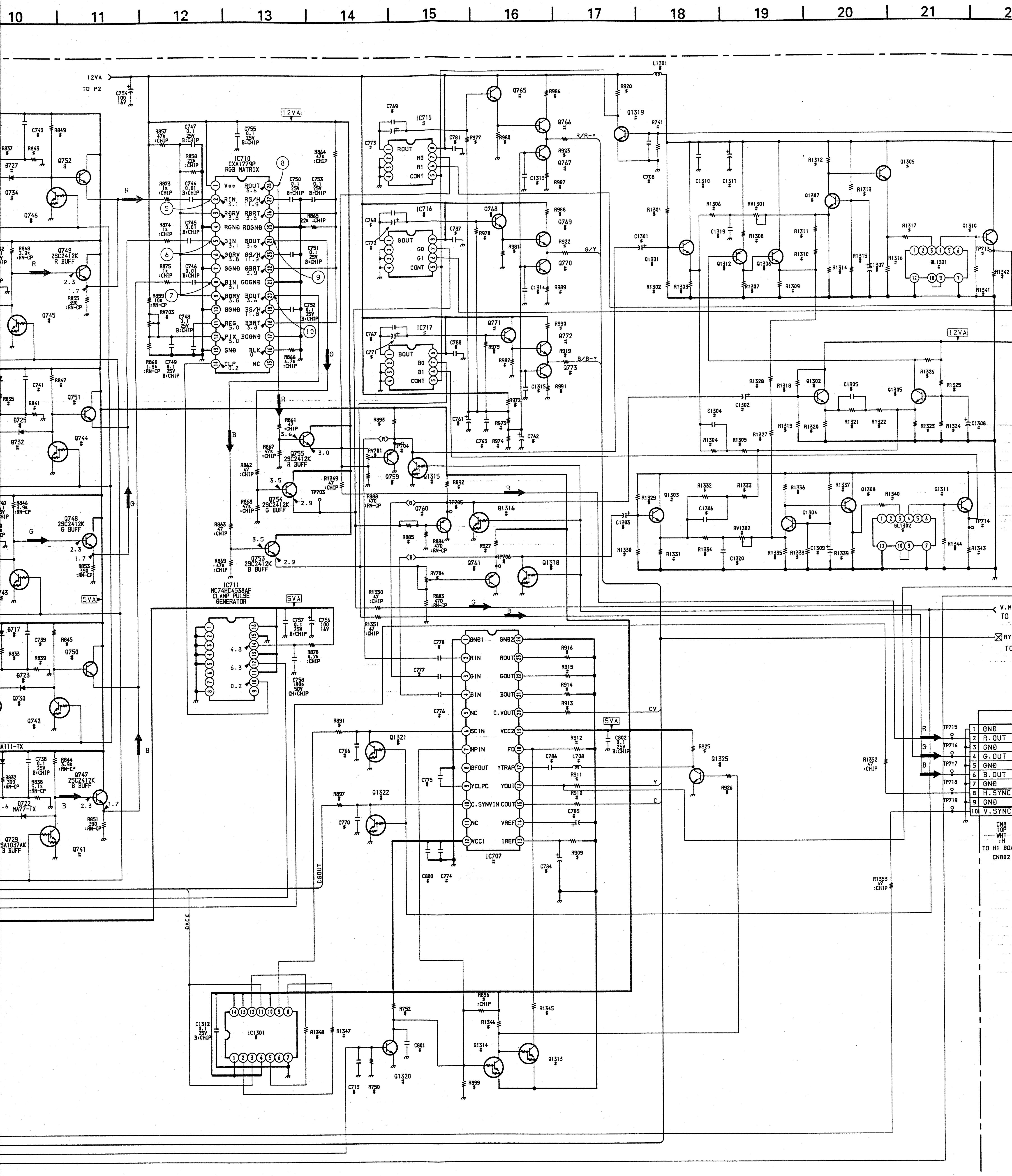
Q307	A–1
Q310	B–1
Q313	B–2
Q314	B–2
Q315	A–5
Q316	A–3
Q317	A–3
Q318	B–2
Q320	A–5
Q321	A–4
Q322	A–3
Q351	A–2
Q352	A–1
Q355	A–3
Q356	A–4
Q357	A–4
Q507	B–3
Q508	B–3
Q509	B–3
Q510	B–3
Q511	C–3
Q512	C–3
Q513	B–4
Q514	B–4
Q515	B–4
Q516	B–4
Q517	C–4
Q518	C–4
Q519	B–3
Q520	B–3
Q521	B–3
Q522	B–3
Q523	C–3
Q524	C–3
Q525	B–3
Q526	B–3
Q527	B–3
Q528	B–3
Q529	C–3
Q530	C–3
Q543	B–4
Q544	B–4
Q545	B–4
Q546	B–4
Q547	C–4
Q548	C–4
Q549	B–5
Q550	B–5
Q551	B–5
Q552	B–5
Q553	C–5
Q554	C–5
Q555	B–4
Q556	B–4
Q557	B–4
Q558	B–4
Q559	C–4
Q560	C–4
Q561	B–4
Q562	B–4
Q563	B–4
Q564	B–4
Q565	C–4
Q566	C–4
Q581	B–5
Q582	B–5
Q583	B–5
Q584	B–5
Q585	C–5
Q586	C–5
Q588	B–6
Q589	B–6
Q590	B–6
Q591	B–6
Q592	C–6
Q593	C–6
Q594	B–5
Q5	
Q5	
Q5	
Q5	
Q5	
Q6	
Q6	
Q6	
Q6	
Q6	
Q6	
Q6	
Q6	
Q6	
Q6	
Q7	
Q7	
Q7	
Q7	
Q7	
Q7	
Q7	
Q7	
Q7	
Q1	
Q1	
Q1	
Q1	
Q1	
Q1	
Q1	
Q1	
Q1	
Q1	



						DIODE	
14	B–2	Q543	B–4	Q595	B–5		
15	A–5	Q544	B–4	Q596	B–5		
16	A–3	Q545	B–4	Q597	B–5		
17	A–3	Q546	B–4	Q598	C–5	D16	G–6
18	B–2	Q547	C–4	Q599	C–5	D17	G–6
20	A–5	Q548	C–4	Q600	B–5	D18	G–6
21	A–4	Q549	B–5	Q601	B–5	D19	G–6
22	A–3	Q550	B–5	Q602	B–5	D20	G–6
51	A–2	Q551	B–5	Q603	B–5	D21	G–6
52	A–1	Q552	B–5	Q604	C–5	D22	G–6
55	A–3	Q553	C–5	Q605	C–5	D23	G–6
56	A–4	Q554	C–5	Q612	D–3	D322	A–3
57	A–4	Q555	B–4	Q613	D–3	D324	A–2
07	B–3	Q556	B–4	Q614	D–4	D326	A–3
08	B–3	Q557	B–4	Q616	C–6	D501	B–3
09	B–3	Q558	B–4	Q723	B–8	D502	B–3
10	B–3	Q559	C–4	Q725	B–9	D503	B–3
11	C–3	Q560	C–4	Q727	B–9	D504	B–3
12	C–3	Q561	B–4	Q747	B–8	D505	C–3
13	B–4	Q562	B–4	Q748	B–9	D506	C–3
14	B–4	Q563	B–4	Q749	B–10	D520	B–4
15	B–4	Q564	B–4	Q753	A–8	D521	B–4
16	B–4	Q565	C–4	Q754	A–8	D522	B–4
17	C–4	Q566	C–4	Q755	A–8	D523	C–4
18	C–4	Q581	B–5	Q1003	E–1	D524	C–4
19	B–3	Q582	B–5	Q1004	E–2	D537	B–5
20	B–3	Q583	B–5	Q1005	E–1	D538	B–5
21	B–3	Q584	B–5	Q1008	D–2	D539	B–5
22	B–3	Q585	C–5	Q1009	D–2	D540	B–5
23	C–3	Q586	C–5	Q1010	D–2	D541	C–5
24	C–3	Q588	B–6	Q1013	D–1	D542	C–5
25	B–3	Q589	B–6	Q1016	G–1	D555	B–4
26	B–3	Q590	B–6	Q1018	G–2	D701	B–8
27	B–3	Q591	B–6	Q1019	G–2	D702	B–9
28	B–3	Q592	C–6			D703	B–10
29	C–3	Q593	C–6				
30	C–3	Q594	B–5				

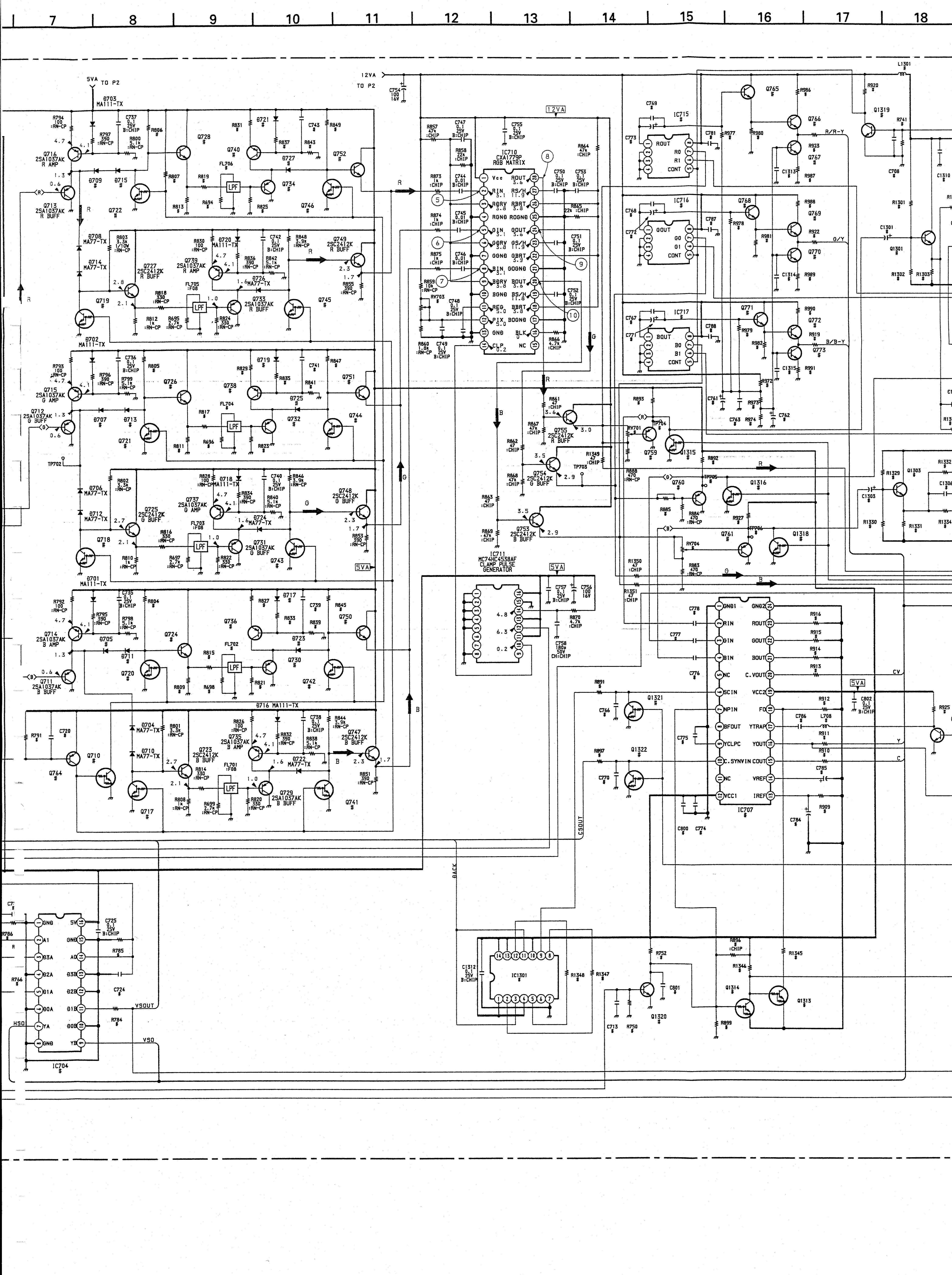
- □ : Pattern from the side which enab
- ▨ : Pattern of the rear side.

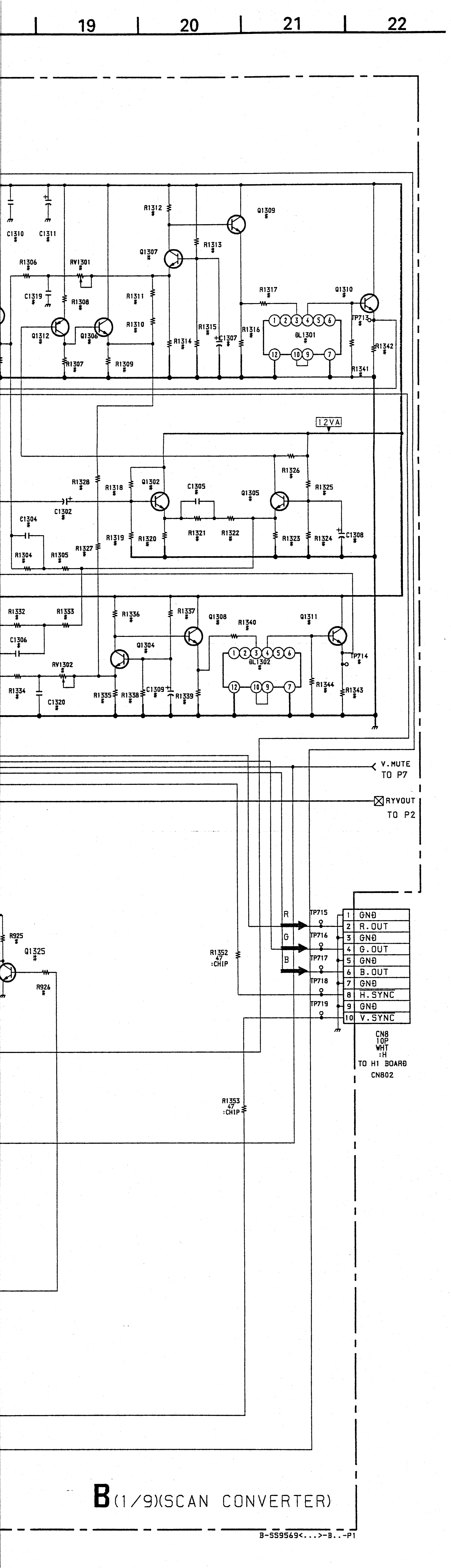

TO P4
RDA
GDA
TO P5
TO P6
BDA
DA-CTL
TO P7
IC703
BT121
D/A CONVERTER
IC702
IC705
IC701
IC704
5VA
TO P2
12VA
Q703 MA111-TX
Q716 2SA1037AK R AMP
Q713 2SA1037AK R BUFF
Q715 2SA1037AK G AMP
Q712 2SA1037AK G BUFF
Q714 2SA1037AK B AMP
Q711 2SA1037AK B BUFF
Q727 2SC2412K R BUFF
Q739 2SA1037AK R AMP
Q733 2SA1037AK R BUFF
Q749 2SC2412K R BUFF
Q725 2SC2412K G BUFF
Q737 2SA1037AK G AMP
Q731 2SA1037AK G BUFF
Q748 2SC2412K G BUFF
Q723 2SC2412K B BUFF
Q735 2SA1037AK B AMP
Q729 2SA1037AK B BUFF
Q747 2SC2412K B BUFF
LPF
FL701 :F08
FL703 :F08
FL705 :F08
TP701
TP702
CSOUT
HSOUT
VSOUT
HSO
VSO
NT/PAL
Y/R-Y/B-Y.ON
RES
SDA
SCL
OSD
TO P7
R
G
B
1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O


10
11
12
13
14
15
16
17
18
19
20
21
12VA
TO P2
IC710
CXA1779P
RGB MATRIX
IC711
MC74HC4538AF
CLAMP PULSE
GENERATOR
IC715
ROUT
IC716
GOUT
IC717
BOUT
IC707
IC1301
Q755
2SC2412K
R BUFF
Q754
2SC2412K
G BUFF
Q753
2SC2412K
B BUFF
Q749
2SC2412K
R BUFF
Q748
2SC2412K
G BUFF
Q747
2SC2412K
B BUFF
Q729
2SA1037AK
B BUFF
R/R-Y
G/Y
B/B-Y
5VA
GND1
RIN
GIN
BIN
NC
SCIN
NPIN
BFOUT
YCLPC
C.SYNVIN
VCC1
GND2
ROUT
GOUT
BOUT
C.VOUT
VCC2
FO
YTRAP
YOUT
COUT
VREF
IREF
CV
Y
C
CSOUT
BACK
BL1301
BL1302
RV1301
RV1302
RV701
RV703
RV704
L1301
L708
TP703
TP704
TP705
TP706
TP713
TP714
TP715
TP716
TP717
TP718
TP719
1 GND
2 R.OUT
3 GND
4 G.OUT
5 GND
6 B.OUT
7 GND
8 H.SYNC
9 GND
10 V.SYNC
CN8
10P
WHT
TO H1 BOA
CN802
R
G
B
MA77-TX

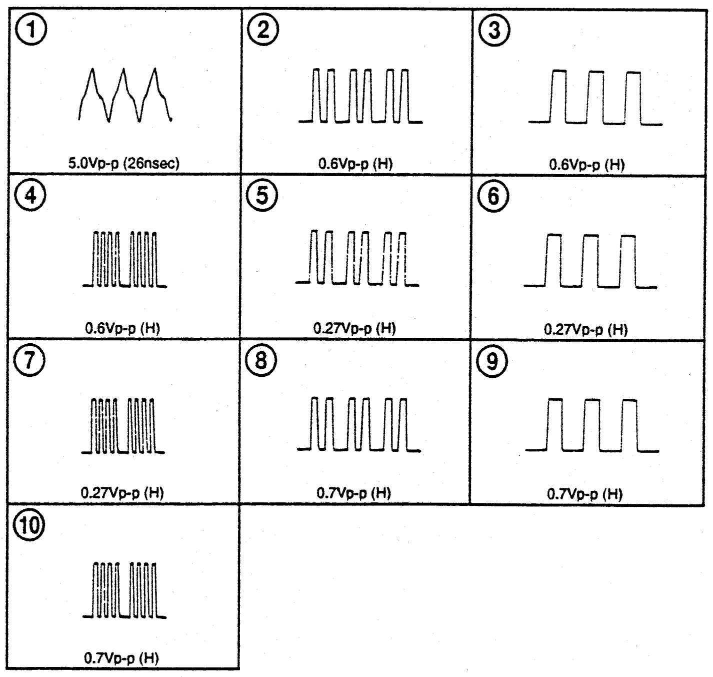
B(1/9)(SCAN CONVERTER)

B-SS9569<...>-B..-P1

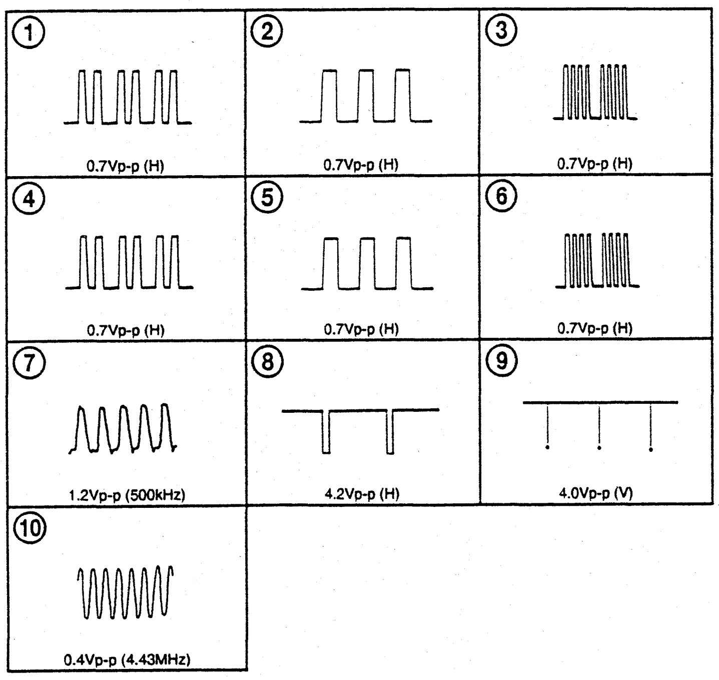

7
8
9
10
11
12
13
14
15
16
17
18
5VA TO P2
D703 MA111-TX
12VA TO P2
C754 100 16V
12VA
IC710 CXA1779P RGB MATRIX
Vcc
RIN
RGRY
RGND
GIN
GGRY
GGND
BIN
BGRY
BGND
REG
PIX
GND
CLP
ROUT
RS/H
RBRT
RGBGND
GOUT
GS/H
GBRT
GOGND
BOUT
BS/H
BBRT
BOGND
BLK
NC
Q716 2SA1037AK R AMP
Q713 2SA1037AK R BUFF
Q715 2SA1037AK G AMP
Q712 2SA1037AK G BUFF
Q714 2SA1037AK B AMP
Q711 2SA1037AK B BUFF
Q727 2SC2412K R BUFF
Q739 2SA1037AK R AMP
Q733 2SA1037AK R BUFF
Q749 2SC2412K R BUFF
Q725 2SC2412K G BUFF
Q737 2SA1037AK G AMP
Q731 2SA1037AK G BUFF
Q748 2SC2412K G BUFF
Q723 2SC2412K B BUFF
Q735 2SA1037AK B AMP
Q729 2SA1037AK B BUFF
Q747 2SC2412K B BUFF
Q755 2SC2412K R BUFF
Q754 2SC2412K G BUFF
Q753 2SC2412K B BUFF
D716 MA111-TX
D702 MA111-TX
D701 MA111-TX
D708 MA77-TX
D714 MA77-TX
D706 MA77-TX
D712 MA77-TX
D704 MA77-TX
D710 MA77-TX
LPF
FL701
FL702
FL703
FL704
FL705
FL706
IC711 MC74HC4538AF CLAMP PULSE GENERATOR
5VA
IC715
ROUT
R0
R1
CONT
IC716
GOUT
G0
G1
CONT
IC717
BOUT
B0
B1
CONT
R/R-Y
G/Y
B/B-Y
IC707
GND1
RIN
GIN
BIN
NC
SCIN
NPIN
BFOUT
YCLPC
C.SYNVIN
NC
VCC1
GND2
ROUT
GOUT
BOUT
C.VOUT
VCC2
FO
YTRAP
YOUT
COUT
VREF
IREF
CV
Y
C
IC1301
IC704
GND
A1
B3A
B2A
B1A
B0A
YA
GND
5V
GND
A0
B3B
B2B
B1B
B0B
YB
VSOUT
HSO
VSO
CSOUT
BACK
TP702
TP703
TP704
TP705
TP706
RV701
RV703
RV704
Q1321
Q1322
Q1320
Q1314
Q1313
Q1315
Q1316
Q1318
Q1319
Q1301
Q1303


19
20
21
22
Q1309
R1312
R1313
Q1307
C1310
C1311
R1306
RV1301
R1317
Q1310
C1319
R1308
R1311
R1310
Q1312
Q1306
R1314
R1315
C1307
R1316
GL1301
TP713
R1342
R1307
R1309
R1341
12VA
R1326
R1328
R1318
Q1302
C1305
Q1305
R1325
C1302
C1304
R1321
R1322
R1319
R1320
R1323
R1324
C1308
R1304
R1305
R1327
R1332
R1333
R1336
R1337
Q1308
R1340
Q1311
C1306
Q1304
GL1302
TP714
RV1302
R1344
R1334
C1320
R1335
R1338
C1309
R1339
R1343
V.MUTE
TO P7
RYVOUT
TO P2
R925
Q1325
R926
R1352
47
:CHIP
R
G
B
TP715
TP716
TP717
TP718
TP719
1 GND
2 R.OUT
3 GND
4 G.OUT
5 GND
6 B.OUT
7 GND
8 H.SYNC
9 GND
10 V.SYNC
CN8
10P
WHT
:H
TO H1 BOARD
CN802
R1353
47
:CHIP
B(1/9)(SCAN CONVERTER)
B-SS9569<...>-B..-P1

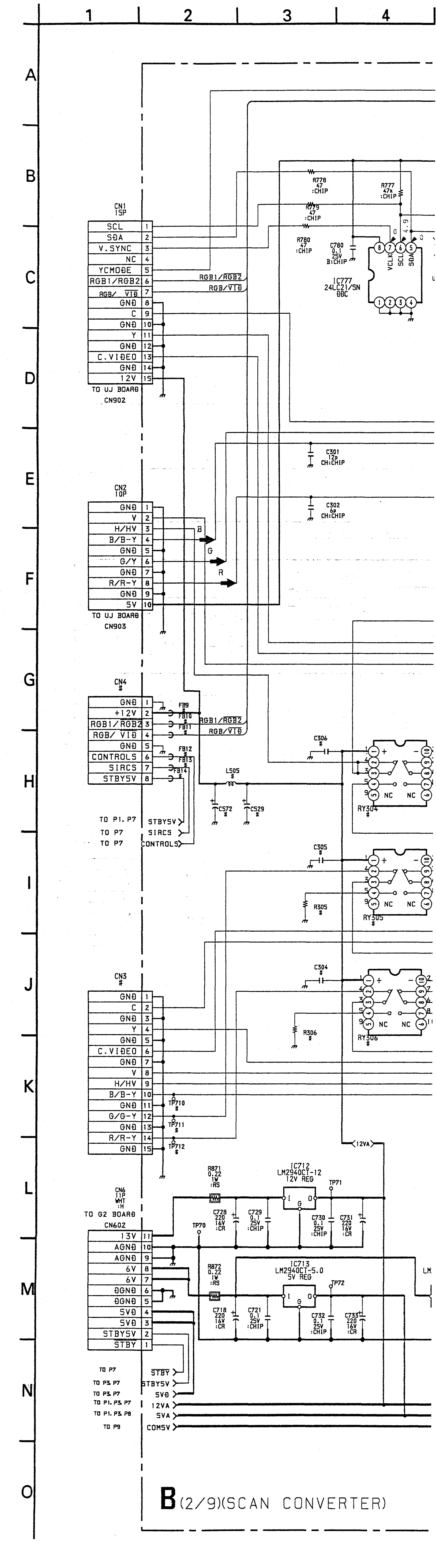
B (1/9) BOARD


①
5.0Vp-p (26nsec)
②
0.6Vp-p (H)
③
0.6Vp-p (H)
④
0.6Vp-p (H)
⑤
0.27Vp-p (H)
⑥
0.27Vp-p (H)
⑦
0.27Vp-p (H)
⑧
0.7Vp-p (H)
⑨
0.7Vp-p (H)
⑩
0.7Vp-p (H)

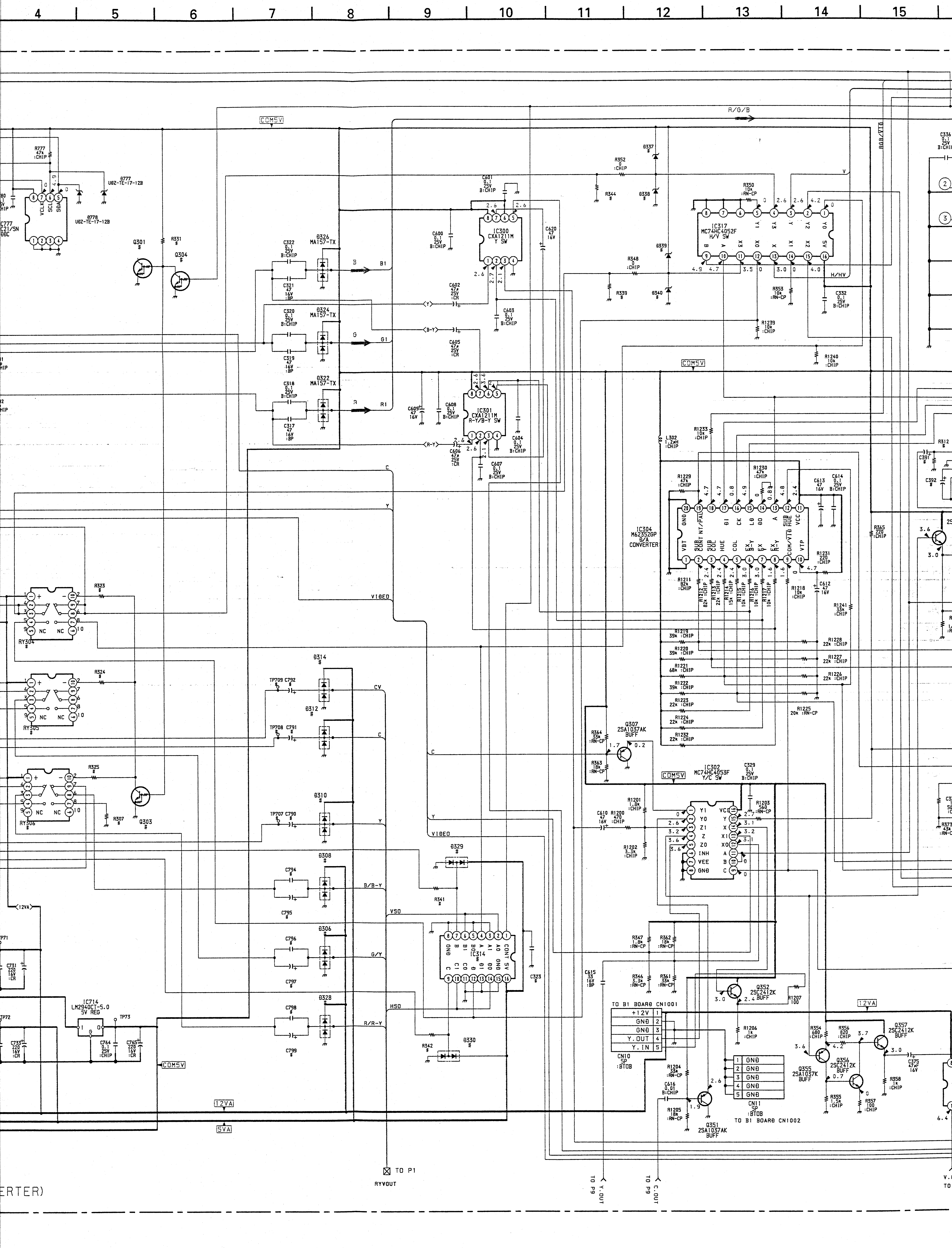
B (2/9) BOARD

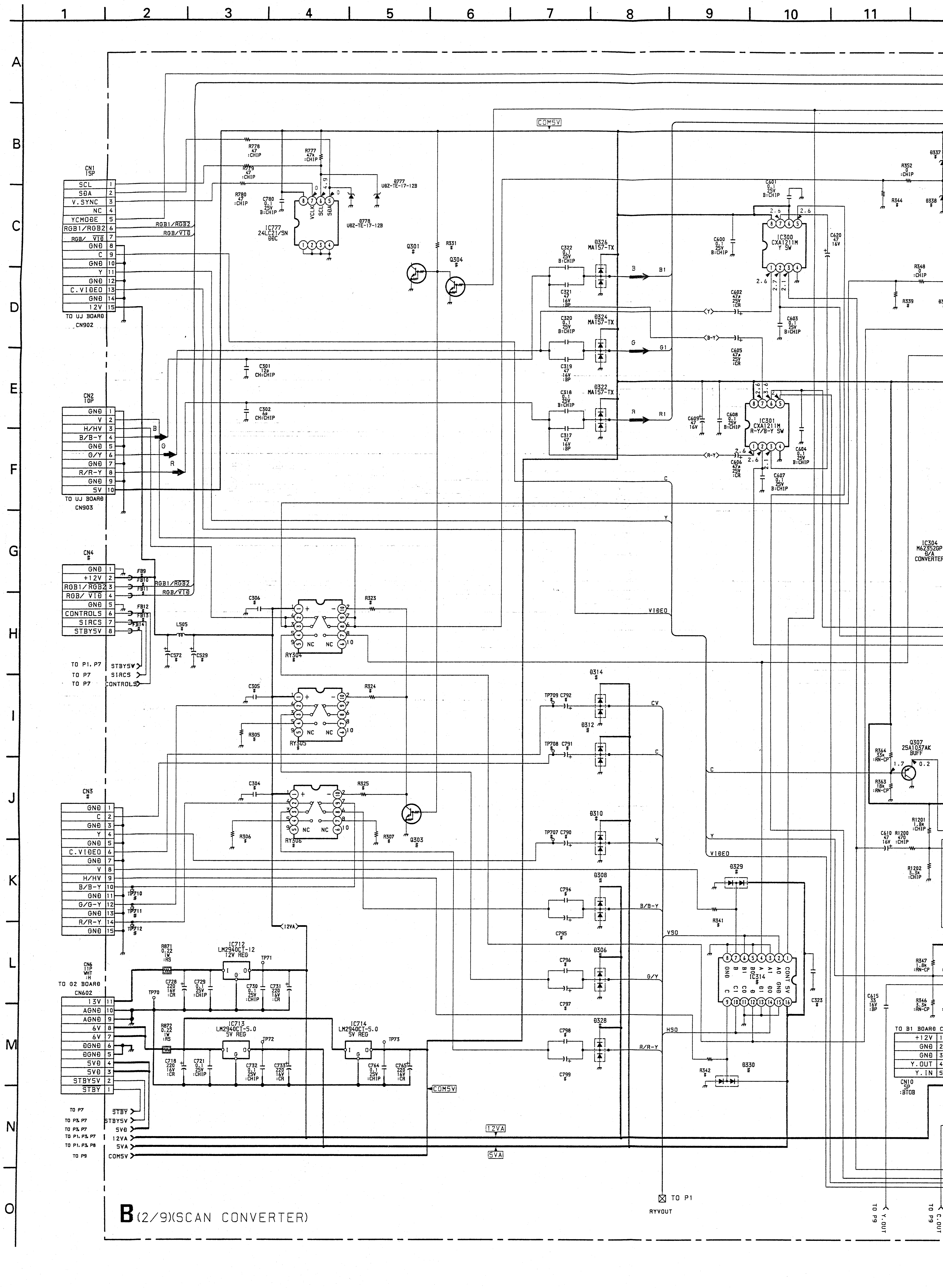


①
0.7Vp-p (H)
②
0.7Vp-p (H)
③
0.7Vp-p (H)
④
0.7Vp-p (H)
⑤
0.7Vp-p (H)
⑥
0.7Vp-p (H)
⑦
1.2Vp-p (500kHz)
⑧
4.2Vp-p (H)
⑨
4.0Vp-p (V)
⑩
0.4Vp-p (4.43MHz)

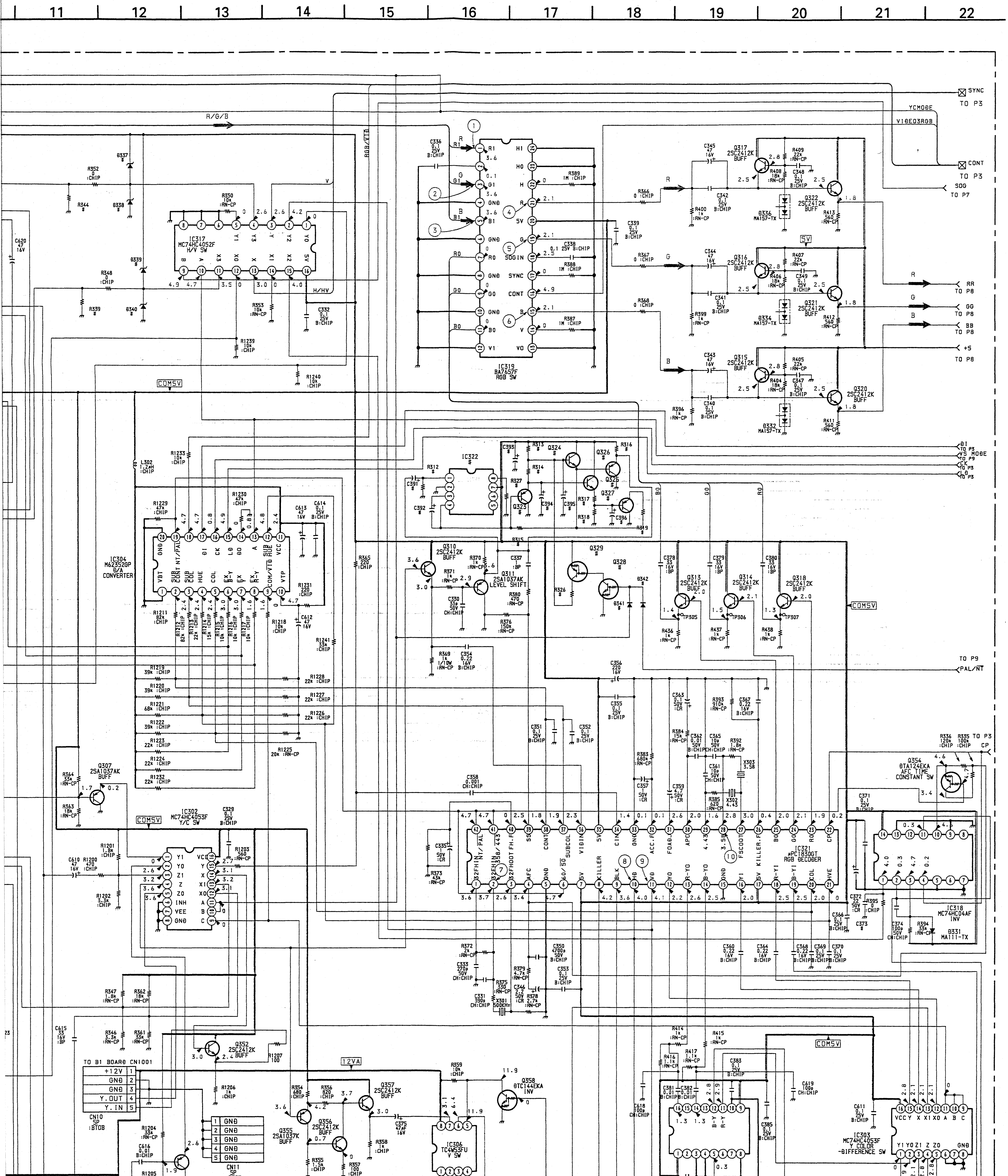


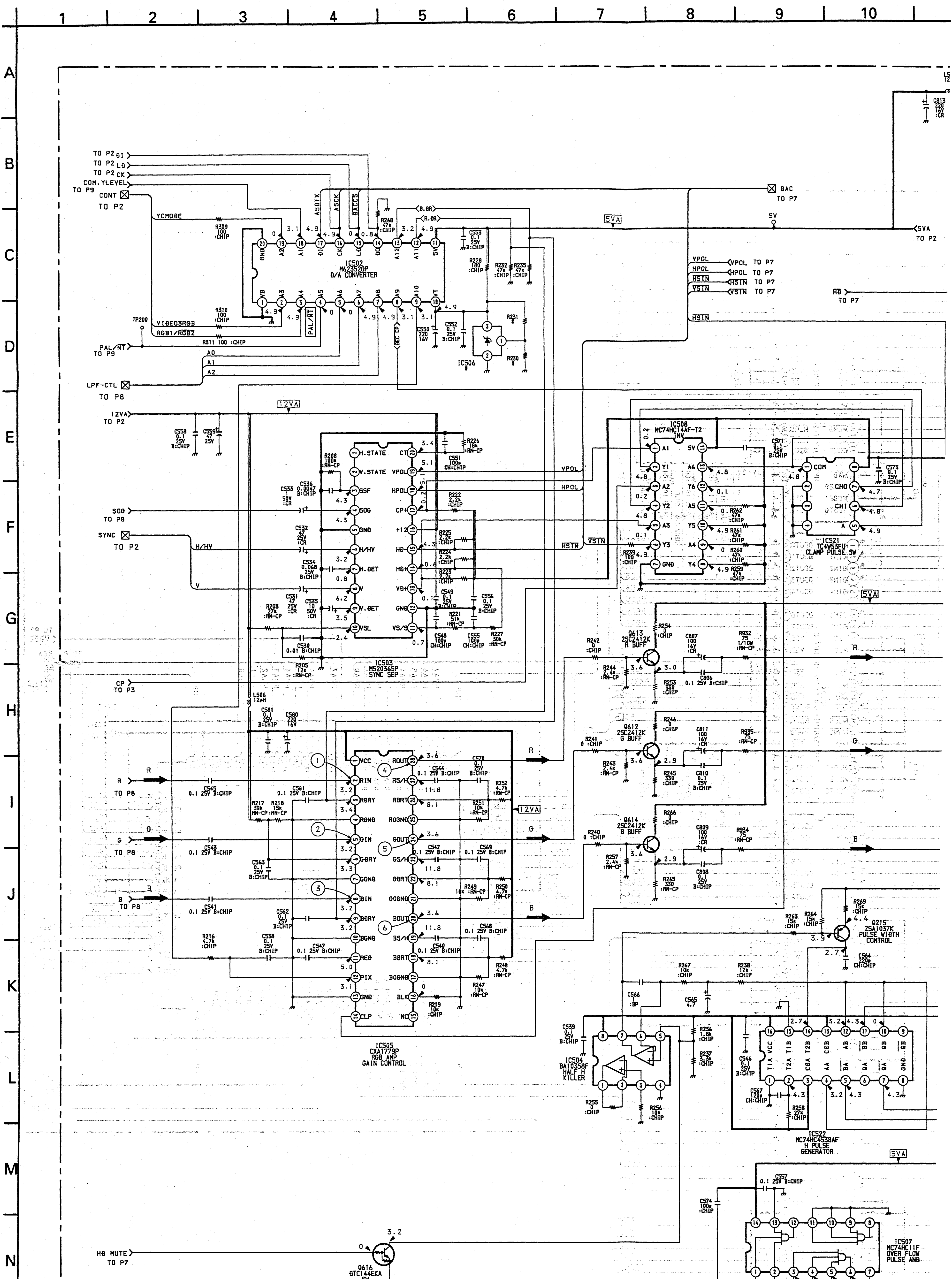
1
2
3
4
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
CN1 15P
SCL 1
SDA 2
V.SYNC 3
NC 4
YCMODE 5
RGB1/RGB2 6
RGB/VID 7
GND 8
C 9
GND 10
Y 11
GND 12
C.VIDEO 13
GND 14
12V 15
TO UJ BOARD CN902
R778 47 :CHIP
R779 47 :CHIP
R780 47 :CHIP
R777 47k :CHIP
C780 0.1 25V B:CHIP
IC777 24LC21/SN DDC
VCLK
SCL
SDA
RGB1/RGB2
RGB/VID
C301 12p CH:CHIP
C302 6p CH:CHIP
CN2 10P
GND 1
V 2
H/HV 3
B/B-Y 4
GND 5
G/Y 6
GND 7
R/R-Y 8
GND 9
5V 10
TO UJ BOARD CN903
B
G
R
CN4
GND 1
+12V 2
RGB1/RGB2 3
RGB/VID 4
GND 5
CONTROLS 6
SIRCS 7
STBY5V 8
FB9
FB10
FB11
FB12
FB13
FB14
L505
C572
C529
TO P1, P7
TO P7
TO P7
STBY5V
SIRCS
CONTROLS
C306
RY304
NC
C305
R305
RY305
C304
R306
RY306
CN3
GND 1
C 2
GND 3
Y 4
GND 5
C.VIDEO 6
GND 7
V 8
H/HV 9
B/B-Y 10
GND 11
G/G-Y 12
GND 13
R/R-Y 14
GND 15
TP710
TP711
TP712
12VA
CN6 11P WHT :H
TO G2 BOARD CN602
13V 11
AGND 10
AGND 9
6V 8
6V 7
DGND 6
DGND 5
5VD 4
5VD 3
STBY5V 2
STBY 1
R871 0.22 1W :RS
IC712 LM2940CT-12 12V REG
TP71
TP70
C728 220 16V :CR
C729 0.1 25V :CHIP
C730 0.1 25V :CHIP
C731 220 16V :CR
R872 0.22 1W :RS
IC713 LM2940CT-5.0 5V REG
TP72
C718 220 16V :CR
C721 0.1 25V :CHIP
C732 0.1 25V :CHIP
C733 220 16V :CR
TO P7
TO P3, P7
TO P3, P7
TO P1, P3, P7
TO P1, P3, P8
TO P9
STBY
STBY5V
5VD
12VA
5VA
COM5V
B(2/9)(SCAN CONVERTER)


4
5
6
7
8
9
10
11
12
13
14
15
COMSV
R/G/B
RGB/VTG
R777 47k :CHIP
D777 UDZ-TE-17-12B
D778 UDZ-TE-17-12B
VCLK
SCL
SDA
C777
Q301
R331
Q304
C322 0.1 25V B:CHIP
D326 MA157-TX
C321 47 16V :BP
B
B1
C320 0.1 25V B:CHIP
D324 MA157-TX
C319 47 16V :BP
G
G1
C318 0.1 25V B:CHIP
D322 MA157-TX
C317 47 16V :BP
R
R1
C601 0.1 25V B:CHIP
C600 0.1 25V B:CHIP
IC300 CXA1211M Y SW
C620 47 16V
C602 47μ 25V :CR
C603 0.1 25V B:CHIP
C605 47μ 25V :CR
C609 47 16V
C608 0.1 25V B:CHIP
IC301 CXA1211M R-Y/B-Y SW
C604 0.1 25V B:CHIP
C606 47μ 25V :CR
C607 0.1 25V B:CHIP
(Y)
(B-Y)
(R-Y)
R352 0 :CHIP
R344
D337
D338
D339
D340
R348 0 :CHIP
R339
R350 10k :RN-CP
IC317 MC74HC4052F H/V SW
R353 10k :RN-CP
C332 0.1 25V B:CHIP
R1239 10k :CHIP
R1240 10k :CHIP
H/HV
V
C336 0.1 25V B:CHIP
COMSV
L302 1.2μH :CHIP
R1233 10k :CHIP
R1229 47k :CHIP
R1230 47k :CHIP
C613 47 16V
C614 0.1 25V B:CHIP
IC304 M62352GP D/A CONVERTER
VBT
SUB CONT
NT/PAL
SUB COL
SUB HUE
HUE
COL
EX-Y
EX
EX-Y
COM/VTG
VTP
GND
DI
CK
LD
DO
SUB HUE
VCC
R1211 82k :CHIP
R1212 82k :CHIP
R1213 22k :CHIP
R1214 15k :CHIP
R1215 10k :CHIP
R1216 10k :CHIP
R1217 10k :CHIP
R1218 10k :CHIP
R1231 220 :CHIP
C612 47 16V
R1241 33k :CHIP
R1219 39k :CHIP
R1220 39k :CHIP
R1221 68k :CHIP
R1222 39k :CHIP
R1223 22k :CHIP
R1224 22k :CHIP
R1232 22k :CHIP
R1228 22k :CHIP
R1227 22k :CHIP
R1226 22k :CHIP
R1225 20k :RN-CP
R365 220 :CHIP
R312
C391
C392
C
Y
VIDEO
R323
RY304
NC
R324
RY305
R325
RY306
R307
Q303
D314
TP709 C792
CV
D312
TP708 C791
C
D310
TP707 C790
Y
D329
VIDEO
D308
C794
C795
B/B-Y
R341
VSO
D306
C796
C797
G/Y
IC314
CONT 5V
GND
D328
C798
C799
HSO
R/R-Y
R342
D330
C323
(12VA)
TP71
C731 220 16V :CR
TP72
C733 220 16V :CR
IC714 LM2940CT-5.0 5V REG
TP73
C764 0.1 25V :CHIP
C765 220 16V :CR
COMSV
12VA
5VA
TO P1
RYVOUT
R364 33k :RN-CP
R363 18k :RN-CP
Q307 2SA1037AK BUFF
IC302 MC74HC4053F Y/C SW
C329 0.1 25V B:CHIP
COMSV
R1201 1.8k :CHIP
R1203 560 :RN-CP
C610 47 16V
R1200 470 :CHIP
R1202 3.3k :CHIP
R347 1.8k :RN-CP
R362 18k :RN-CP
C615 33 16V :BP
R346 3.3k :RN-CP
R361 33k :RN-CP
Q352 2SC2412K BUFF
R1207 100
TO B1 BOARD CN1001
+12V
GND
GND
Y.OUT
Y.IN
CN10 5P :BTOB
R1206 1k :CHIP
R1204 33k :RN-CP
C616 0.01 B:CHIP
R1205 18k :RN-CP
Q351 2SA1037AK BUFF
GND
CN11 5P :BTOB
TO B1 BOARD CN1002
12VA
R354 680 :CHIP
R356 820 :CHIP
Q357 2SC2412K BUFF
C375 47μF 16V
Q355 2SA1037AK BUFF
Q356 2SC2412K BUFF
R358 1k :CHIP
R355 1.5k :CHIP
R357 100 :CHIP
TO P9 Y.OUT
TO P9 C.OUT
ERTER)


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
CN1 15P
SCL 1
SDA 2
V.SYNC 3
NC 4
YCMODE 5
RGB1/RGB2 6
RGB/ VID 7
GND 8
C 9
GND 10
Y 11
GND 12
C.VIDEO 13
GND 14
12V 15
TO UJ BOARD CN902
CN2 10P
GND 1
V 2
H/HV 3
B/B-Y 4
GND 5
G/Y 6
GND 7
R/R-Y 8
GND 9
5V 10
TO UJ BOARD CN903
CN4
GND 1
+12V 2
RGB1/RGB2 3
RGB/ VID 4
GND 5
CONTROLS 6
SIRCS 7
STBY5V 8
FB9
FB10
FB11
FB12
FB13
FB14
RGB1/RGB2
RGB/VID
L505
C572
C529
TO P1, P7
TO P7
TO P7
STBY5V
SIRCS
CONTROLS
CN3
GND 1
C 2
GND 3
Y 4
GND 5
C.VIDEO 6
GND 7
V 8
H/HV 9
B/B-Y 10
GND 11
G/G-Y 12
GND 13
R/R-Y 14
GND 15
TP710
TP711
TP712
CN6 11P WHT :H
TO G2 BOARD CN602
13V 11
AGND 10
AGND 9
6V 8
6V 7
DGND 6
DGND 5
5VD 4
5VD 3
STBY5V 2
STBY 1
TO P7
TO P3, P7
TO P3, P7
TO P1, P3, P7
TO P1, P3, P8
TO P9
STBY
STBY5V
5VD
12VA
5VA
COM5V
R778 47 :CHIP
R779 47 :CHIP
R780 47 :CHIP
R777 47k :CHIP
C780 0.1 25V B:CHIP
IC777 24LC21/SN DDC
VCLK SCL SDA
D777 UDZ-TE-17-12B
D778 UDZ-TE-17-12B
Q301
Q304
R331
COM5V
C301 12p CH:CHIP
C302 6p CH:CHIP
C322 0.1 25V B:CHIP
C321 47 16V :BP
D326 MA157-TX
C320 0.1 25V B:CHIP
C319 47 16V :BP
D324 MA157-TX
C318 0.1 25V B:CHIP
C317 47 16V :BP
D322 MA157-TX
B
G
R
B1
G1
R1
C601 0.1 25V B:CHIP
C600 0.1 25V B:CHIP
IC300 CXA1211M Y SW
C620 47 16V
C602 47 25V :CR
C603 0.1 25V B:CHIP
C605 47 25V :CR
(Y)
(B-Y)
(R-Y)
C609 47 16V
C608 0.1 25V B:CHIP
IC301 CXA1211M R-Y/B-Y SW
C604 0.1 25V B:CHIP
C606 47 25V :CR
C607 0.1 25V B:CHIP
2.6
2.7
2.1
3.6
R352 0 :CHIP
R344
R338
R337
R348 0 :CHIP
R339
IC304 M62352GP D/A CONVERTER
C
Y
VIDEO
C306
R323
RY304
NC
C305
R324
RY305
R305
C304
R325
RY306
R306
R307
Q303
D314
TP709 C792
D312
CV
TP708 C791
C
D310
TP707 C790
Y
D308
C794
C795
B/B-Y
D306
C796
C797
G/Y
D328
C798
C799
R/R-Y
VSD
HSD
C
Y
VIDEO
D329
R341
IC314
CONT 5V
GND
A0 A1 A
B0 B1 B
C0 C1 C
D0 D1 D
C323
R342
D330
Q307 2SA1037AK BUFF
R364 33k :RN-CP
R363 18k :RN-CP
1.7
0.2
R1201 1.8k :CHIP
C610 47 16V
R1200 470 :CHIP
R1202 3.3k :CHIP
R347 1.8k :RN-CP
R346 3.3k :RN-CP
C615 33 16V :BP
TO B1 BOARD
+12V 1
GND 2
GND 3
Y.OUT 4
Y.IN 5
CN10 5P :BTOB
(12VA)
R871 0.22 1W :RS
IC712 LM2940CT-12 12V REG
TP71
TP70
C728 220 16V :CR
C729 0.1 25V :CHIP
C730 0.1 25V :CHIP
C731 220 16V :CR
R872 0.22 1W :RS
IC713 LM2940CT-5.0 5V REG
TP72
C718 220 16V :CR
C721 0.1 25V :CHIP
C732 0.1 25V :CHIP
C733 220 16V :CR
IC714 LM2940CT-5.0 5V REG
TP73
C764 0.1 25V :CHIP
C765 220 16V :CR
COM5V
12VA
5VA
TO P1
RYVOUT
TO P9 Y.OUT
TO P9 C.OUT

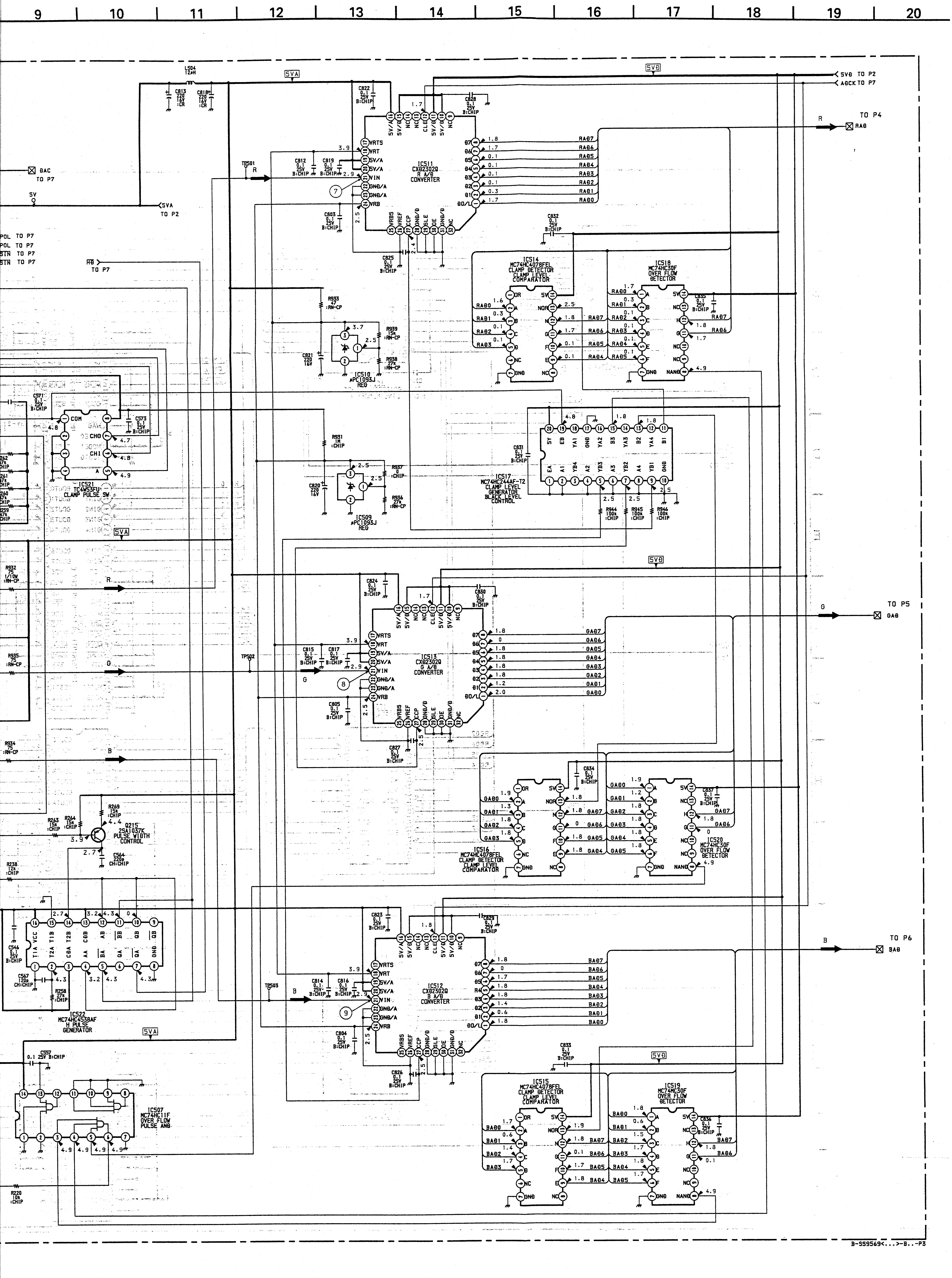
B(2/9)(SCAN CONVERTER)


11
12
13
14
15
16
17
18
19
20
21
22
SYNC
TO P3
YCMODE
VIDEO3RGB
CONT
TO P3
SOG
TO P7
R/G/B
RGB/VTR
IC317
MC74HC4052F
H/V SW
H/HV
IC319
BA7657F
RGB SW
R1
HI
HO
G1
H
B1
GND
RO
SOGIN
SYNC
CONT
GO
BO
V
V1
VO
Q317
2SC2412K
BUFF
Q322
2SC2412K
BUFF
D336
MA157-TX
Q316
2SC2412K
BUFF
Q321
2SC2412K
BUFF
D334
MA157-TX
Q315
2SC2412K
BUFF
Q320
2SC2412K
BUFF
D332
MA157-TX
5V
RR
TO P8
GG
TO P8
BB
TO P8
+5
TO P8
DI
TO P3
VS MODE
TO P9
CK
TO P3
LO
TO P3
COMSV
IC322
Q324
Q326
Q325
Q323
Q327
IC304
M62352GP
D/A
CONVERTER
Q310
2SC2412K
BUFF
Q311
2SA1037AK
LEVEL SHIFT
Q329
Q328
Q313
2SC2412K
BUFF
Q314
2SC2412K
BUFF
Q318
2SC2412K
BUFF
TP305
TP306
TP307
TO P9
PAL/NT
Q354
DTA124EKA
AFC TIME
CONSTANT SW
TO P3
CP
Q307
2SA1037AK
BUFF
IC302
MC74HC4053F
Y/C SW
IC321
uPC1830GT
RGB DECODER
X303
3.58
X302
4.43
IC318
MC74HC04AF
INV
D331
MA111-TX
X301
500KHz
Q352
2SC2412K
BUFF
12VA
TO B1 BOARD CN1001
+12V
GND
GND
Y.OUT
Y.IN
CN10
5P
:BTOB
GND
GND
GND
GND
GND
CN11
5P
:BTOB
TO B1 BOARD CN1002
Q351
2SA1037AK
BUFF
Q355
2SA1037K
BUFF
Q356
2SC2412K
BUFF
Q357
2SC2412K
BUFF
Q358
DTC144EKA
INV
IC306
TC4W53FU
V SW
IC305
TDA4665T
1H DELAY LINE
IC303
MC74HC4053F
Y COLOR
-DIFFERENCE SW
TP301
TP302
TP303
TP304
TO P9
Y.OUT
TO P9
C.OUT
V.OUT
TO P9
V SYNC MODE
TO P7
B-SS9569<...>-B..-P2

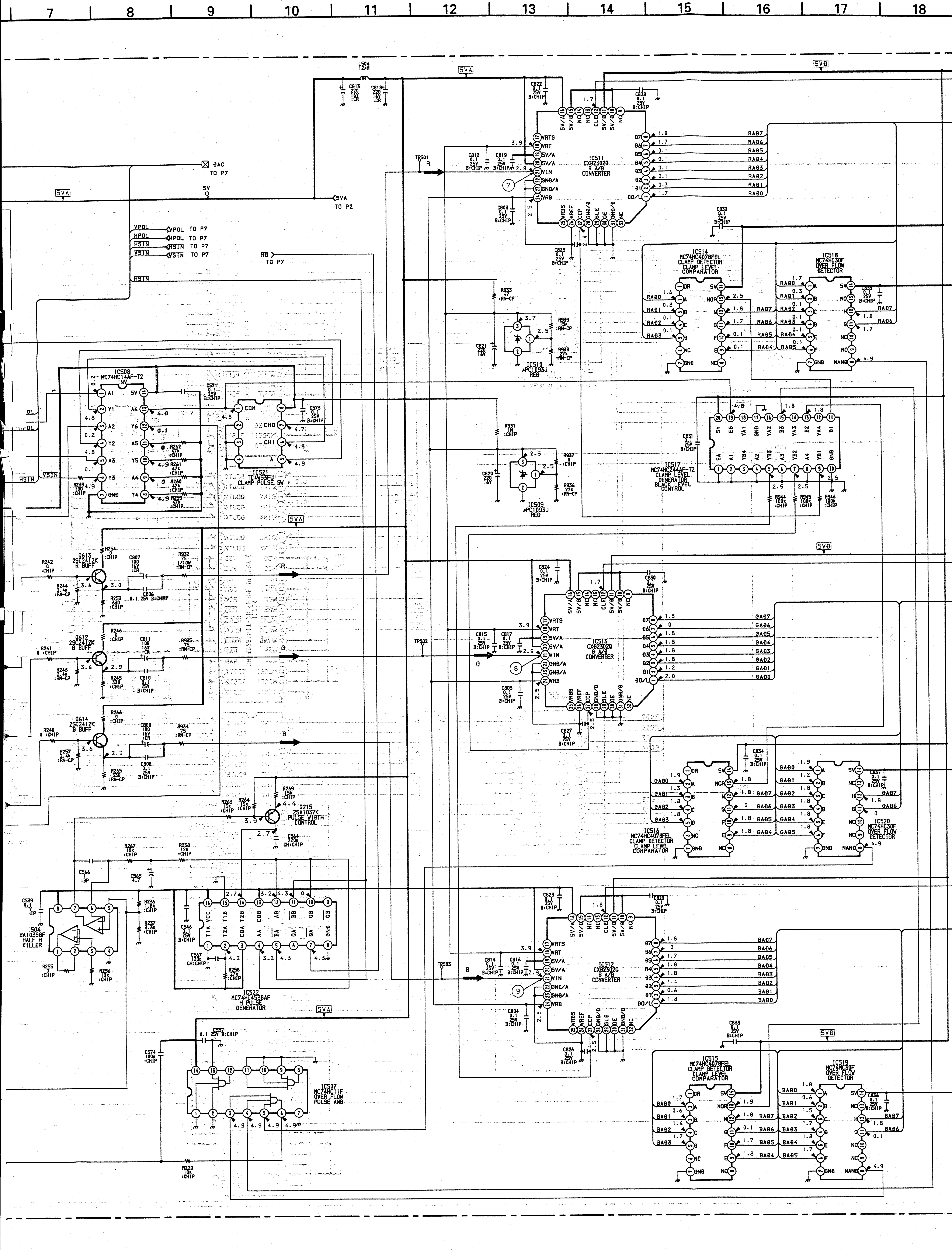


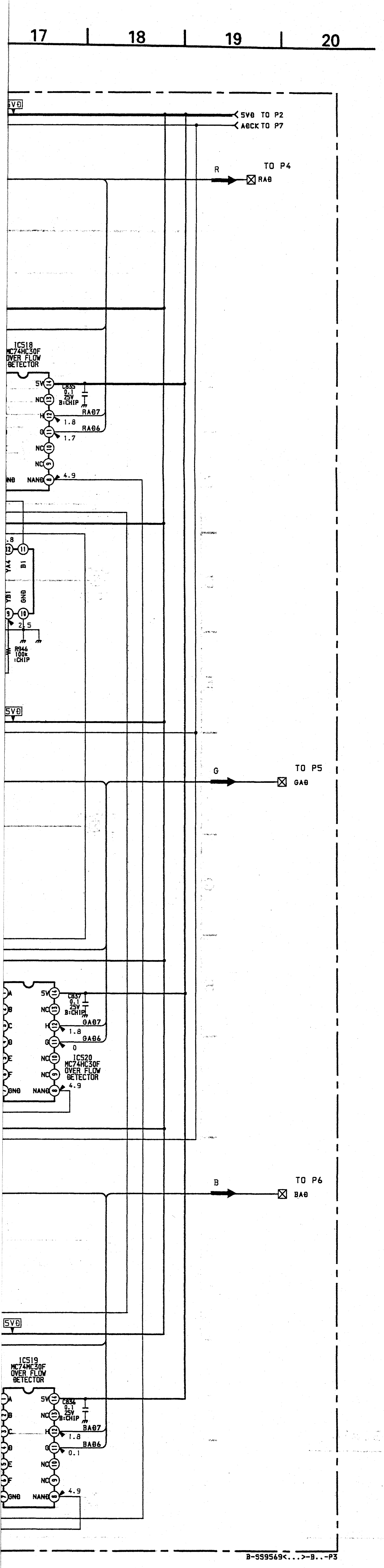
1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
TO P2 DI
TO P2 LD
TO P2 CK
COM.YLEVEL
TO P9
CONT
TO P2
YCMODE
R309 100 :CHIP
IC502 M62352GP D/A CONVERTER
R268 47k :CHIP
B.0R
R.0R
5VA
C553 0.1 25V B:CHIP
R228 180 :CHIP
R232 47k :CHIP
R235 47k :CHIP
BAC TO P7
5V
5VA TO P2
VPOL TO P7
HPOL TO P7
HSIN TO P7
VSIN TO P7
HD TO P7
TP200
VIDEO3RGB
RGB1/RGB2
R310 100 :CHIP
R311 100 :CHIP
PAL/NT
TO P9
A0
A1
A2
C550 220 16V
C552 0.1 25V B:CHIP
IC506
R231
R230
LPF-CTL
TO P8
12VA
12VA TO P2
C558 0.1 25V B:CHIP
C559 47 25V
IC503 M52036SP SYNC SEP
H.STATE
V.STATE
SSF
SOG
GND
H/HV
H.DET
V.DET
VSL
CT
VPOL
HPOL
CP
+12
HD
VD
GND
VS/S
R208 100k :RN-CP
C533 1 50V :CR
C536 0.0047 B:CHIP
C532 47 25V :CR
C534 0.068 25V B:CHIP
C531 47 25V :CR
C535 10 50V :CR
R203 27k :RN-CP
R205 12k :RN-CP
C530 0.01 B:CHIP
R226 18k :RN-CP
C551 100p CH:CHIP
R222 2.2k :CHIP
R225 2.2k :CHIP
R224 2.2k :CHIP
R223 2.2k :CHIP
C549 0.1 25V B:CHIP
R221 51k :RN-CP
C556 0.1 25V B:CHIP
C548 100p CH:CHIP
C555 100p CH:CHIP
R227 30k :RN-CP
SOG TO P8
SYNC TO P2
H/HV
V
CP TO P3
IC508 MC74HC14AF-T2 INV
IC521 TC4W53FU CLAMP PULSE SW
C571 0.1 25V B:CHIP
C573 0.1 25V B:CHIP
R262 47k :CHIP
R261 47k :CHIP
R260 47k :CHIP
R259 47k :CHIP
R239 100 :CHIP
Q613 2SC2412K R BUFF
Q612 2SC2412K G BUFF
Q614 2SC2412K B BUFF
R254 0 :CHIP
R242 0 :CHIP
R244 2.4k :RN-CP
R253 330 :CHIP
C807 100 16V :CR
C806 0.1 25V B:CHIP
R932 75 1/10W :RN-CP
R246 0 :CHIP
R241 0 :CHIP
R243 2.4k :RN-CP
R245 330 :CHIP
C811 100 16V :CR
C810 0.1 25V B:CHIP
R935 75 :RN-CP
R266 0 :CHIP
R240 0 :CHIP
R257 2.4k :RN-CP
R265 330 :CHIP
C809 100 16V :CR
C808 0.1 25V B:CHIP
R934 75 :RN-CP
R
G
B
L506 12mH
C581 0.1 25V B:CHIP
C580 220 16V
IC505 CXA1779P RGB AMP GAIN CONTROL
VCC
RIN
RGRY
RGND
GIN
GGRY
GGND
BIN
BGRY
BGND
REG
PIX
GND
CLP
ROUT
RS/H
RBRT
RGGND
GOUT
GS/H
GBRT
GOGND
BOUT
BS/H
BBRT
BOGND
BLK
NC
R TO P8
G TO P8
B TO P8
C545 0.1 25V B:CHIP
C543 0.1 25V B:CHIP
C541 0.1 25V B:CHIP
C561 0.1 25V B:CHIP
R217 39k :RN-CP
R218 15k :RN-CP
C563 0.1 25V B:CHIP
C562 0.1 25V B:CHIP
R216 4.7k :CHIP
C538 0.1 25V B:CHIP
C547 0.1 25V B:CHIP
C570 0.1 25V B:CHIP
C544 0.1 25V B:CHIP
R252 4.7k :RN-CP
R251 10k :RN-CP
C542 0.1 25V B:CHIP
C569 0.1 25V B:CHIP
R249 10k :RN-CP
R250 4.7k :RN-CP
C568 0.1 25V B:CHIP
C540 0.1 25V B:CHIP
R248 4.7k :RN-CP
R247 10k :RN-CP
R219 10k :CHIP
Q215 2SA1037K PULSE WIDTH CONTROL
R269 15k :CHIP
R263 15k :CHIP
R264 15k :CHIP
C564 220p CH:CHIP
R267 10k :CHIP
R238 12k :CHIP
C566 1 :BP
C565 4.7
C539 0.1 25V B:CHIP
IC504 BA10358F HALF H KILLER
R234 1.8k :CHIP
R237 3.3k :CHIP
R255 0 :CHIP
R256 10k :CHIP
IC522 MC74HC4538AF H PULSE GENERATOR
C546 0.1 25V B:CHIP
C567 120p CH:CHIP
R258 27k :CHIP
C557 0.1 25V B:CHIP
C574 100p :CHIP
IC507 MC74HC11F OVER FLOW PULSE AND
HD MUTE
TO P7
Q616 DTC144EKA SW
AD OVF
TO P7
R220 10k :CHIP
C813 220 16V :CR

B(3/9)(SCAN CONVERTER)

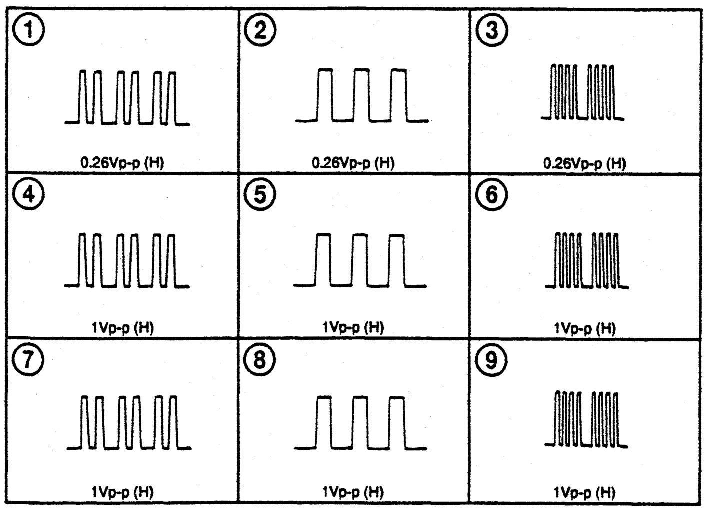


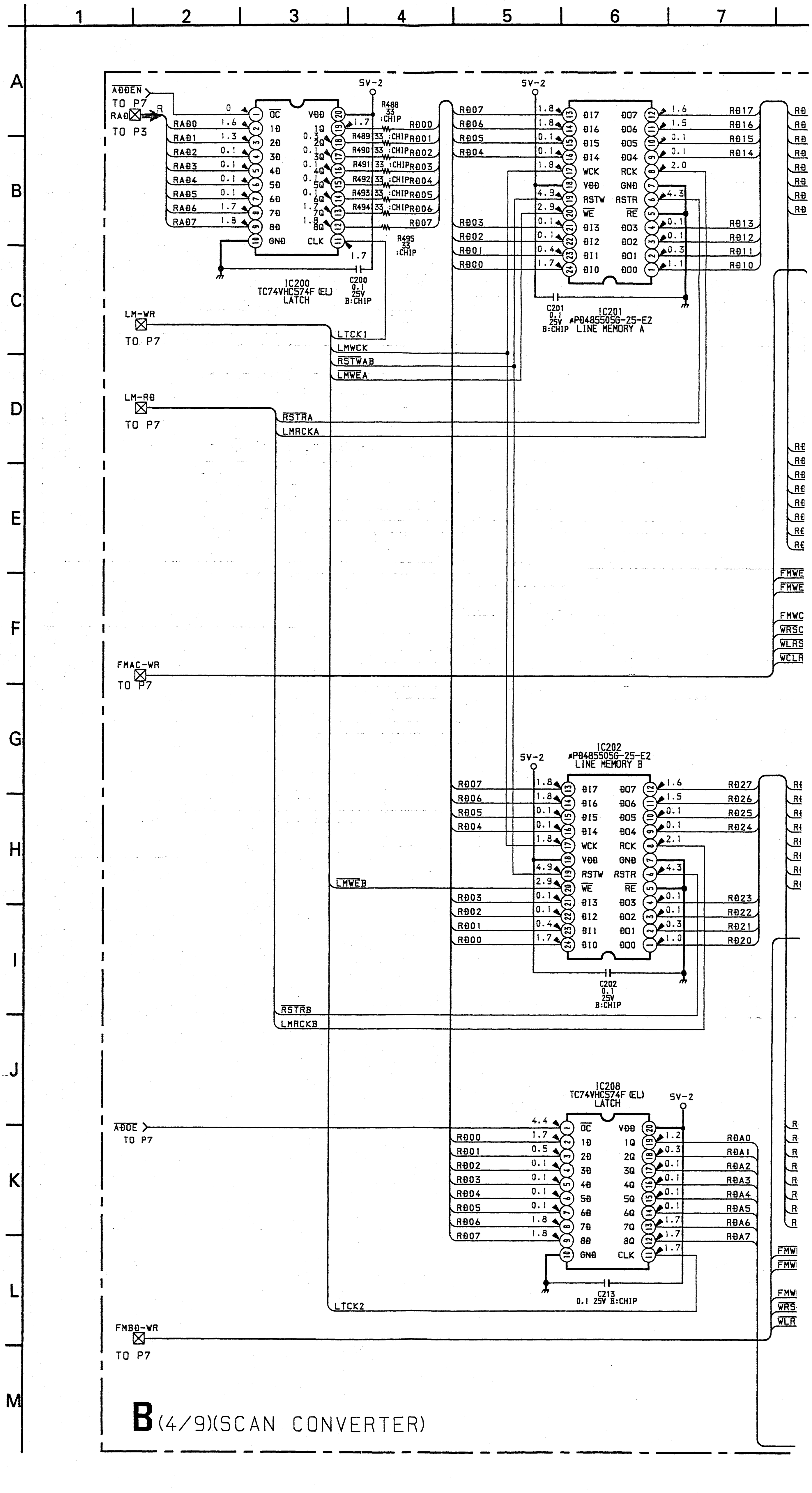
9
10
11
12
13
14
15
16
17
18
19
20
L504 12μH
C813 220 16V :CR
C818 220 16V :CR
5VA
5VD
5VD TO P2
ADCK TO P7
C822 0.1 25V B:CHIP
C828 0.1 25V B:CHIP
IC511 CX82302Q R A/D CONVERTER
TO P4
RAD
BAC TO P7
5V
5VA TO P2
TP501
C812 0.1 25V B:CHIP
C819 0.1 25V B:CHIP
C803 0.1 25V B:CHIP
C825 0.1 25V B:CHIP
RAD7
RAD6
RAD5
RAD4
RAD3
RAD2
RAD1
RAD0
POL TO P7
POL TO P7
STN TO P7
STN TO P7
HD TO P7
C832 0.1 25V B:CHIP
IC514 MC74HC4078FEL CLAMP DETECTOR CLAMP LEVEL COMPARATOR
IC518 MC74HC30F OVER FLOW DETECTOR
C835 0.1 25V B:CHIP
R933 47 :RN-CP
R939 15k :RN-CP
R938 27k :RN-CP
C821 220 16V
IC510 μPC1093J REG
C571 0.1 25V B:CHIP
C573 0.1 25V B:CHIP
IC521 TC4W53FU CLAMP PULSE SW
R931 :CHIP
C831 0.1 25V B:CHIP
IC517 MC74HC244AF-T2 CLAMP LEVEL GENERATOR BLACK LEVEL CONTROL
R937 0 :CHIP
R936 27k :RN-CP
C820 220 16V
IC509 μPC1093J REG
R944 100k :CHIP
R945 100k :CHIP
R946 100k :CHIP
R932 75 1/10W :RN-CP
C824 0.1 25V B:CHIP
C830 0.1 25V B:CHIP
TO P5
GAD
IC513 CX82302Q G A/D CONVERTER
TP502
C815 0.1 25V B:CHIP
C817 0.1 25V B:CHIP
C805 0.1 25V B:CHIP
C827 0.1 25V B:CHIP
R935 75 :RN-CP
GAD7
GAD6
GAD5
GAD4
GAD3
GAD2
GAD1
GAD0
R934 75 :RN-CP
C834 0.1 25V B:CHIP
C837 0.1 25V B:CHIP
IC516 MC74HC4078FEL CLAMP DETECTOR CLAMP LEVEL COMPARATOR
IC520 MC74HC30F OVER FLOW DETECTOR
R269 15k :CHIP
R263 15k :CHIP
R264 15k :CHIP
Q215 2SA1037K PULSE WIDTH CONTROL
C564 220p CH:CHIP
R238 12k :CHIP
C546 0.1 25V B:CHIP
C567 120p CH:CHIP
R258 27k :CHIP
IC522 MC74HC4538AF H PULSE GENERATOR
C823 0.1 25V B:CHIP
C829 0.1 25V B:CHIP
TO P6
BAD
IC512 CX82302Q B A/D CONVERTER
TP503
C814 0.1 25V B:CHIP
C816 0.1 25V B:CHIP
C804 0.1 25V B:CHIP
C826 0.1 25V B:CHIP
BAD7
BAD6
BAD5
BAD4
BAD3
BAD2
BAD1
BAD0
C557 0.1 25V B:CHIP
C833 0.1 25V B:CHIP
IC507 MC74HC11F OVER FLOW PULSE AND
IC515 MC74HC4078FEL CLAMP DETECTOR CLAMP LEVEL COMPARATOR
IC519 MC74HC30F OVER FLOW DETECTOR
C836 0.1 25V B:CHIP
R220 10k :CHIP
B-SS9569<...>-B..-P3


7
8
9
10
11
12
13
14
15
16
17
18
IC508 MC74HC14AF-T2 INV
IC521 TC4W53FU CLAMP PULSE SW
IC510 μPC1093J REG
IC509 μPC1093J REG
IC511 CX823020 R A/D CONVERTER
IC513 CX823020 G A/D CONVERTER
IC512 CX823020 B A/D CONVERTER
IC514 MC74HC4078FEL CLAMP DETECTOR CLAMP LEVEL COMPARATOR
IC518 MC74HC30F OVER FLOW DETECTOR
IC517 MC74HC244AF-T2 CLAMP LEVEL GENERATOR BLACK LEVEL CONTROL
IC516 MC74HC4078FEL CLAMP DETECTOR CLAMP LEVEL COMPARATOR
IC520 MC74HC30F OVER FLOW DETECTOR
IC515 MC74HC4078FEL CLAMP DETECTOR CLAMP LEVEL COMPARATOR
IC519 MC74HC30F OVER FLOW DETECTOR
IC522 MC74HC4538AF H PULSE GENERATOR
IC507 MC74HC11F OVER FLOW PULSE AND
IC504 BA10358F HALF H KILLER
Q613 2SC2412K R BUFF
Q612 2SC2412K G BUFF
Q614 2SC2412K B BUFF
Q215 2SA1037K PULSE WIDTH CONTROL
L504 12μH
5VA
5VD
DAC TO P7
5V
5VA TO P2
VPOL TO P7
HPOL TO P7
HSTN TO P7
VSTN TO P7
HD TO P7
TP501 R
TP502 G
TP503 B
RA07
RA06
RA05
RA04
RA03
RA02
RA01
RA00
GA07
GA06
GA05
GA04
GA03
GA02
GA01
GA00
BA07
BA06
BA05
BA04
BA03
BA02
BA01
BA00
R933 47 :RN-CP
R939 15k :RN-CP
R938 27k :RN-CP
R931 1M :CHIP
R937 0 :CHIP
R936 27k :RN-CP
R944 100k :CHIP
R945 100k :CHIP
R946 100k :CHIP
R932 75 1/10W :RN-CP
R935 75 :RN-CP
R934 75 :RN-CP
R220 10k :CHIP
R267 10k :CHIP
R238 12k :CHIP
R263 15k :CHIP
R264 15k :CHIP
R269 15k :CHIP
C813 220 16V :CR
C818 220 16V :CR
C821 220 16V
C820 220 16V
C564 220p CH:CHIP
C567 120p CH:CHIP
C574 100p :CHIP
C557 0.1 25V B:CHIP

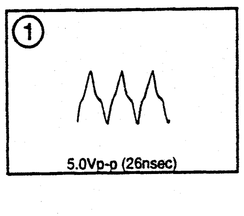

17
18
19
20
5VD
5VD TO P2
ABCK TO P7
R
TO P4
RAD
IC518
MC74HC30F
OVER FLOW
DETECTOR
5V
NC
H
G
NC
NC
NAND
C835
0.1
25V
B:CHIP
RA07
RA06
1.8
1.7
4.9
YA4
B1
YB1
GND
2.5
R946
100k
:CHIP
5VD
G
TO P5
GAD
C837
0.1
25V
B:CHIP
GA07
GA06
1.8
0
IC520
MC74HC30F
OVER FLOW
DETECTOR
4.9
B
TO P6
BAD
5VD
IC519
MC74HC30F
OVER FLOW
DETECTOR
C836
0.1
25V
B:CHIP
BA07
BA06
1.8
0.1
4.9
B-559569<...>-B..-P3

B (3/9) BOARD


①
0.26Vp-p (H)
②
0.26Vp-p (H)
③
0.26Vp-p (H)
④
1Vp-p (H)
⑤
1Vp-p (H)
⑥
1Vp-p (H)
⑦
1Vp-p (H)
⑧
1Vp-p (H)
⑨
1Vp-p (H)

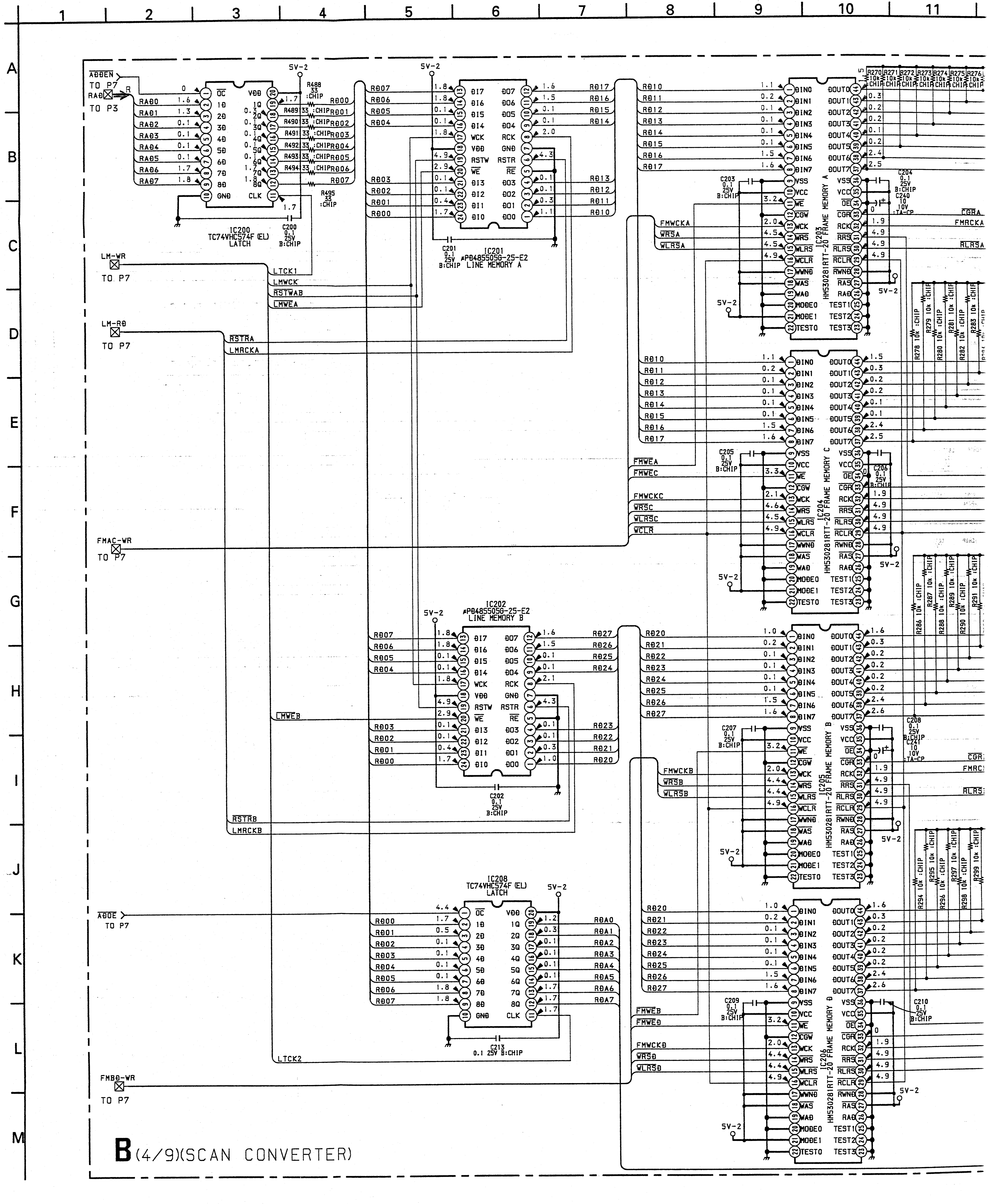

1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
K
L
M
ADDEN
TO P7
RAD
TO P3
RAD0
RAD1
RAD2
RAD3
RAD4
RAD5
RAD6
RAD7
5V-2
R488 33 :CHIP
R489 33 :CHIP
R490 33 :CHIP
R491 33 :CHIP
R492 33 :CHIP
R493 33 :CHIP
R494 33 :CHIP
R495 33 :CHIP
RD00
RD01
RD02
RD03
RD04
RD05
RD06
RD07
IC200
TC74VHC574F (EL)
LATCH
C200 0.1 25V B:CHIP
LM-WR
TO P7
LTCK1
LMWCK
RSTWAB
LMWEA
LM-RD
TO P7
RSTRA
LMRCKA
C201 0.1 25V B:CHIP
IC201
μPD485505G-25-E2
LINE MEMORY A
RD17
RD16
RD15
RD14
RD13
RD12
RD11
RD10
FMAC-WR
TO P7
IC202
μPD485505G-25-E2
LINE MEMORY B
LMWEB
RD27
RD26
RD25
RD24
RD23
RD22
RD21
RD20
C202 0.1 25V B:CHIP
RSTRB
LMRCKB
IC208
TC74VHC574F (EL)
LATCH
ADOE
TO P7
RDA0
RDA1
RDA2
RDA3
RDA4
RDA5
RDA6
RDA7
C213 0.1 25V B:CHIP
LTCK2
FMBD-WR
TO P7
FMWE
FMWC
WRSC
WLRS
WCLR
B (4/9)(SCAN CONVERTER)

B (4/9) BOARD

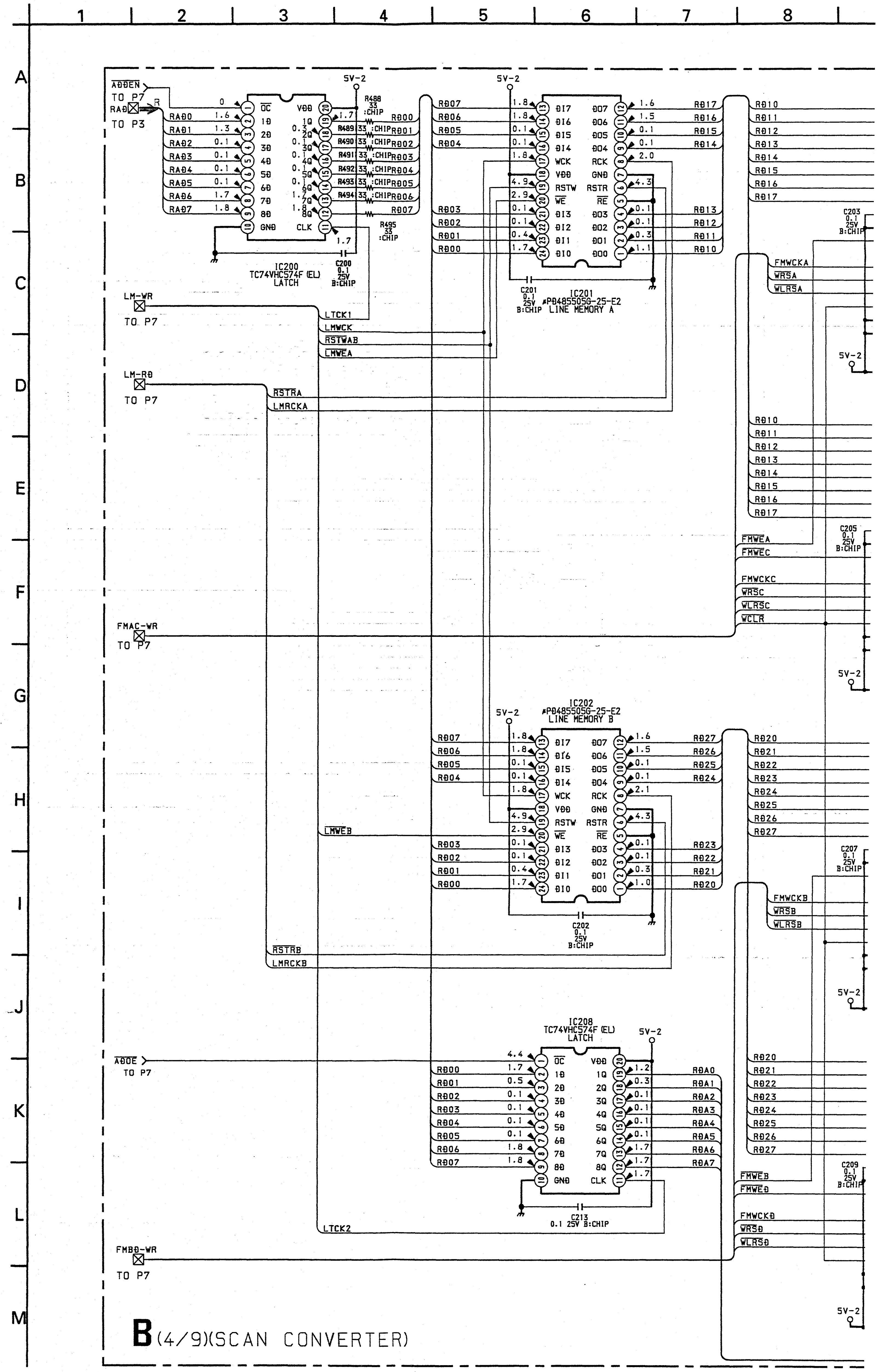


: diagram

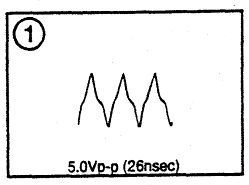
ard ➡

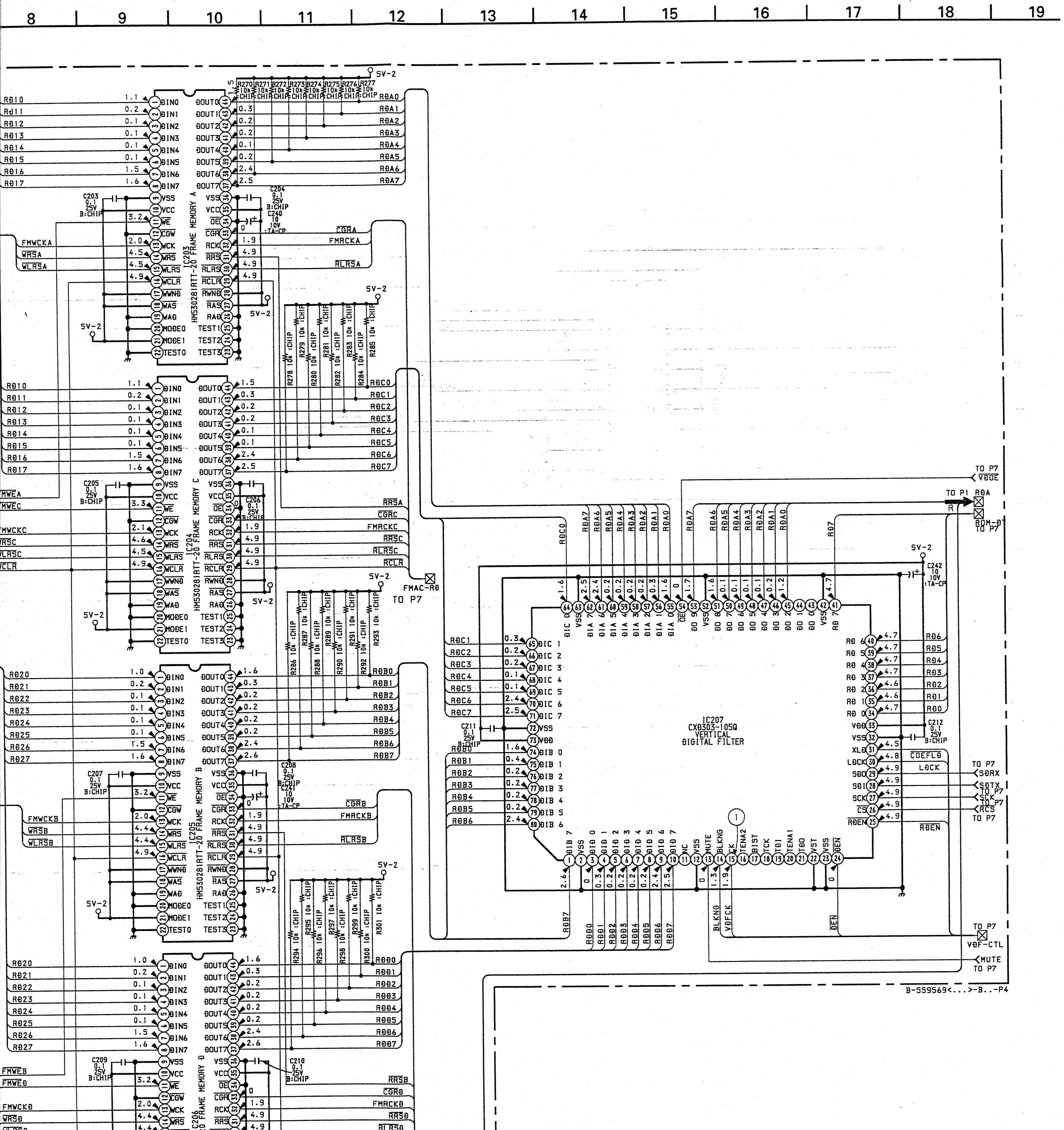

IC200
TC74VHC574F (EL)
LATCH
IC201
µPD485505G-25-E2
LINE MEMORY A
IC202
µPD485505G-25-E2
LINE MEMORY B
IC203
HM530281RTT-20 FRAME MEMORY A
IC204
HM530281RTT-20 FRAME MEMORY C
IC205
HM530281RTT-20 FRAME MEMORY B
IC206
HM530281RTT-20 FRAME MEMORY D
IC208
TC74VHC574F (EL)
LATCH
ADDEN
TO P7
RAD
TO P3
LM-WR
TO P7
LM-RD
TO P7
FMAC-WR
TO P7
ADOE
TO P7
FMBD-WR
TO P7
5V-2
LTCK1
LMWCK
RSTWAB
LMWEA
RSTRA
LMRCKA
LMWEB
RSTRB
LMRCKB
LTCK2
FMWCKA
WRSA
WLRSA
FMWEA
FMWEC
FMWCKC
WRSC
WLRSC
WCLR
FMWCKB
WRSB
WLRSB
FMWEB
FMWED
FMWCKD
WRSD
WLRSD
CGRA
FMRCKA
RLRSA
C200 0.1 25V B:CHIP
C201 0.1 25V B:CHIP
C202 0.1 25V B:CHIP
C203 0.1 25V B:CHIP
C204 0.1 25V B:CHIP
C205 0.1 25V B:CHIP
C206 0.1 25V B:CHIP
C207 0.1 25V B:CHIP
C208 0.1 25V B:CHIP
C209 0.1 25V B:CHIP
C210 0.1 25V B:CHIP
C213 0.1 25V B:CHIP
C240 10 10V :TA-CP
C241 10 10V :TA-CP
R488 33 :CHIP
R495 33 :CHIP
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H I J K L M

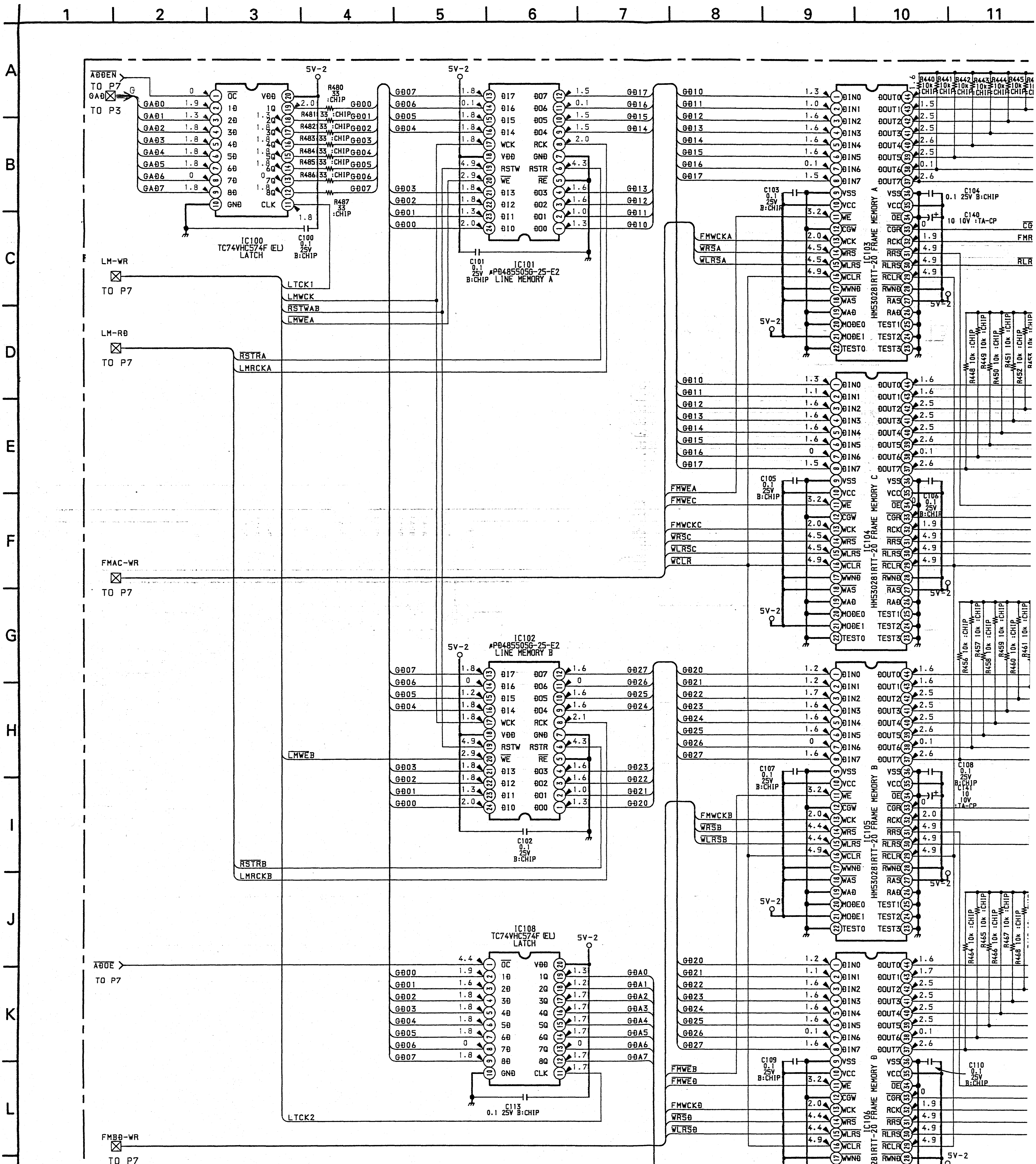
B(4/9)(SCAN CONVERTER)


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
K
L
M
ADDEN
TO P7
RAD
TO P3
RAD0
RAD1
RAD2
RAD3
RAD4
RAD5
RAD6
RAD7
5V-2
R488 33 :CHIP
R489 33 :CHIP
R490 33 :CHIP
R491 33 :CHIP
R492 33 :CHIP
R493 33 :CHIP
R494 33 :CHIP
R495 33 :CHIP
RD00
RD01
RD02
RD03
RD04
RD05
RD06
RD07
IC200
TC74VHC574F (EL)
LATCH
C200 0.1 25V B:CHIP
IC201
μPD485505G-25-E2
LINE MEMORY A
C201 0.1 25V B:CHIP
LM-WR
TO P7
LTCK1
LMWCK
RSTWAB
LMWEA
LM-RD
TO P7
RSTRA
LMRCKA
RD10
RD11
RD12
RD13
RD14
RD15
RD16
RD17
FMWCKA
WRSA
WLRSA
C203 0.1 25V B:CHIP
FMWEA
FMWEC
C205 0.1 25V B:CHIP
FMWCKC
WRSC
WLRSC
WCLR
FMAC-WR
TO P7
IC202
μPD485505G-25-E2
LINE MEMORY B
LMWEB
RD20
RD21
RD22
RD23
RD24
RD25
RD26
RD27
C202 0.1 25V B:CHIP
C207 0.1 25V B:CHIP
FMWCKB
WRSB
WLRSB
RSTRB
LMRCKB
IC208
TC74VHC574F (EL)
LATCH
ADOE
TO P7
RDA0
RDA1
RDA2
RDA3
RDA4
RDA5
RDA6
RDA7
C213 0.1 25V B:CHIP
C209 0.1 25V B:CHIP
FMWEB
FMWED
FMWCKD
WRSD
WLRSD
LTCK2
FMBD-WR
TO P7
B(4/9)(SCAN CONVERTER)

B (4/9) BOARD

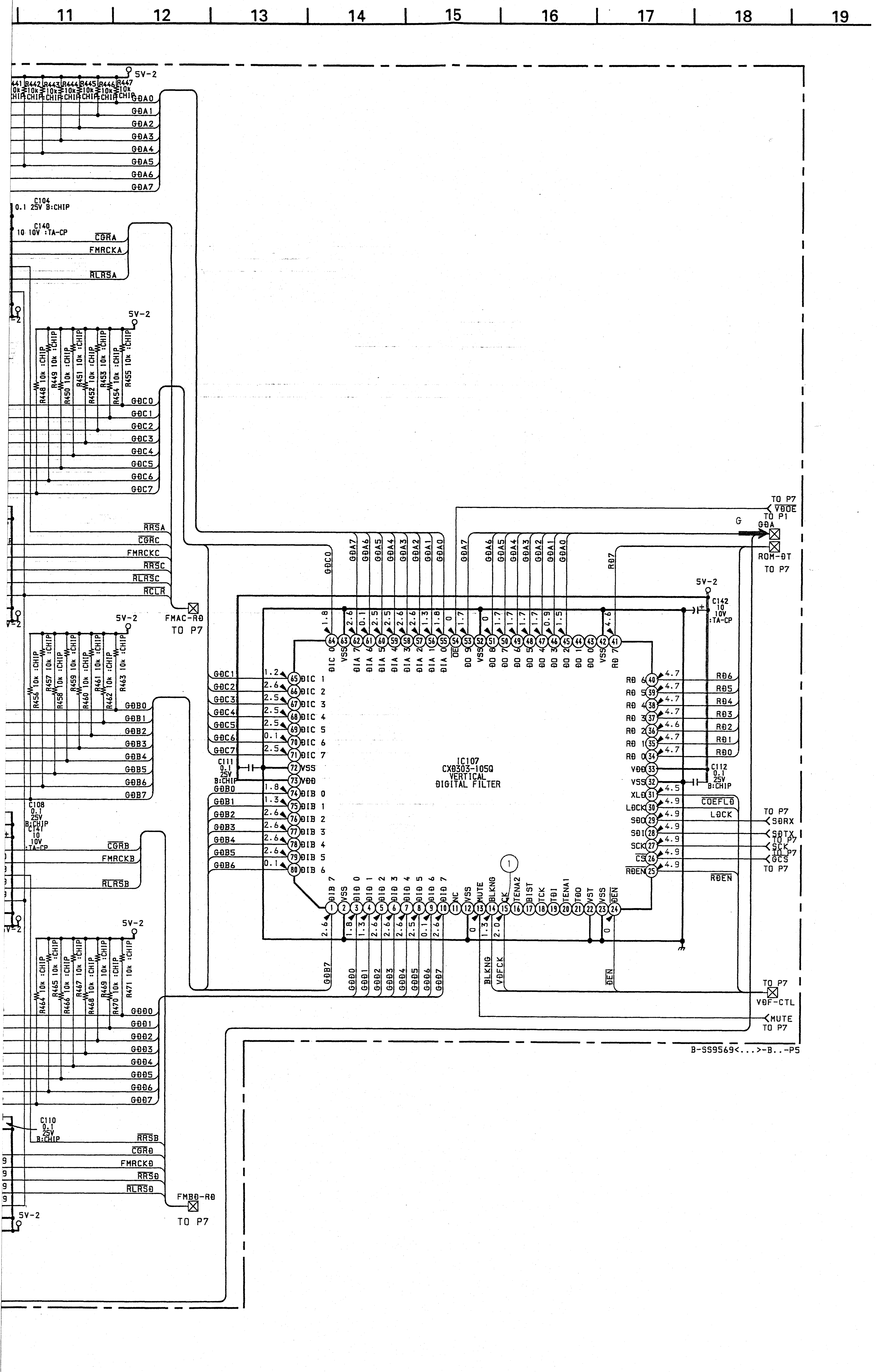

①
5.0Vp-p (26nsec)


8
9
10
11
12
13
14
15
16
17
18
19
IC203 HM530281RTT-20 FRAME MEMORY A
IC204 HM530281RTT-20 FRAME MEMORY C
IC205 HM530281RTT-20 FRAME MEMORY B
IC206 HM530281RTT-20 FRAME MEMORY 0
IC207 CX0303-105Q VERTICAL DIGITAL FILTER
5V-2
FMWCKA
WRSA
WLRSA
CGRA
FMRCKA
RLRSA
RRSA
CGRC
FMRCKC
RRSC
RLRSC
RCLR
FMAC-R0 TO P7
FMWCKB
WRSB
WLRSB
CGRB
FMRCKB
RLRSB
RRS0
CGR0
FMRCK0
RRS0
RLRS0
FMB0-R0 TO P7
TO P7 V00E
TO P1 R0A
R0M-0 TO P7
C0EFL0
L0CK
TO P7 S0RX
S0TX
SCK
RCS
TO P7
R0EN
BLKNG
V0FCK
0EN
TO P7 V0F-CTL
MUTE TO P7
B-SS9569<...>-B..-P4

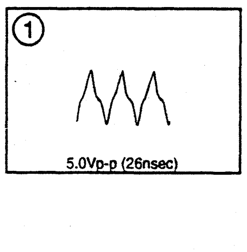


ADDEN TO P7
GAD TO P3
IC100 TC74VHC574F (EL) LATCH
C100 0.1 25V B:CHIP
R480 33 :CHIP
R487 33 :CHIP
5V-2
IC101 μPD485505G-25-E2 LINE MEMORY A
C101 0.1 25V B:CHIP
LM-WR TO P7
LM-RD TO P7
LTCK1
LMWCK
RSTWAB
LMWEA
RSTRA
LMRCKA
FMAC-WR TO P7
IC102 μPD485505G-25-E2 LINE MEMORY B
C102 0.1 25V B:CHIP
LMWEB
RSTRB
LMRCKB
IC108 TC74VHC574F (EL) LATCH
C113 0.1 25V B:CHIP
ADOE TO P7
LTCK2
FMBD-WR TO P7
IC103 HM530281RTT-20 FRAME MEMORY A
IC104 HM530281RTT-20 FRAME MEMORY C
IC105 HM530281RTT-20 FRAME MEMORY B
IC106 HM530281RTT-20 FRAME MEMORY D
C103 0.1 25V B:CHIP
C104 0.1 25V B:CHIP
C140 10 10V :TA-CP
C105 0.1 25V B:CHIP
C106 0.1 25V B:CHIP
C107 0.1 25V B:CHIP
C108 0.1 25V B:CHIP
C141 10 10V :TA-CP
C109 0.1 25V B:CHIP
C110 0.1 25V B:CHIP
FMWCKA
WRSA
WLRSA
FMWEA
FMWEC
FMWCKC
WRSC
WLRSC
WCLR
FMWCKB
WRSB
WLRSB
FMWEB
FMWED
FMWCKD
WRSD
WLRSD
R440–R445 10k :CHIP
R448–R453 10k :CHIP
R456–R461 10k :CHIP
R464–R468 10k :CHIP

B(5/9)(SCAN CONVERTER)

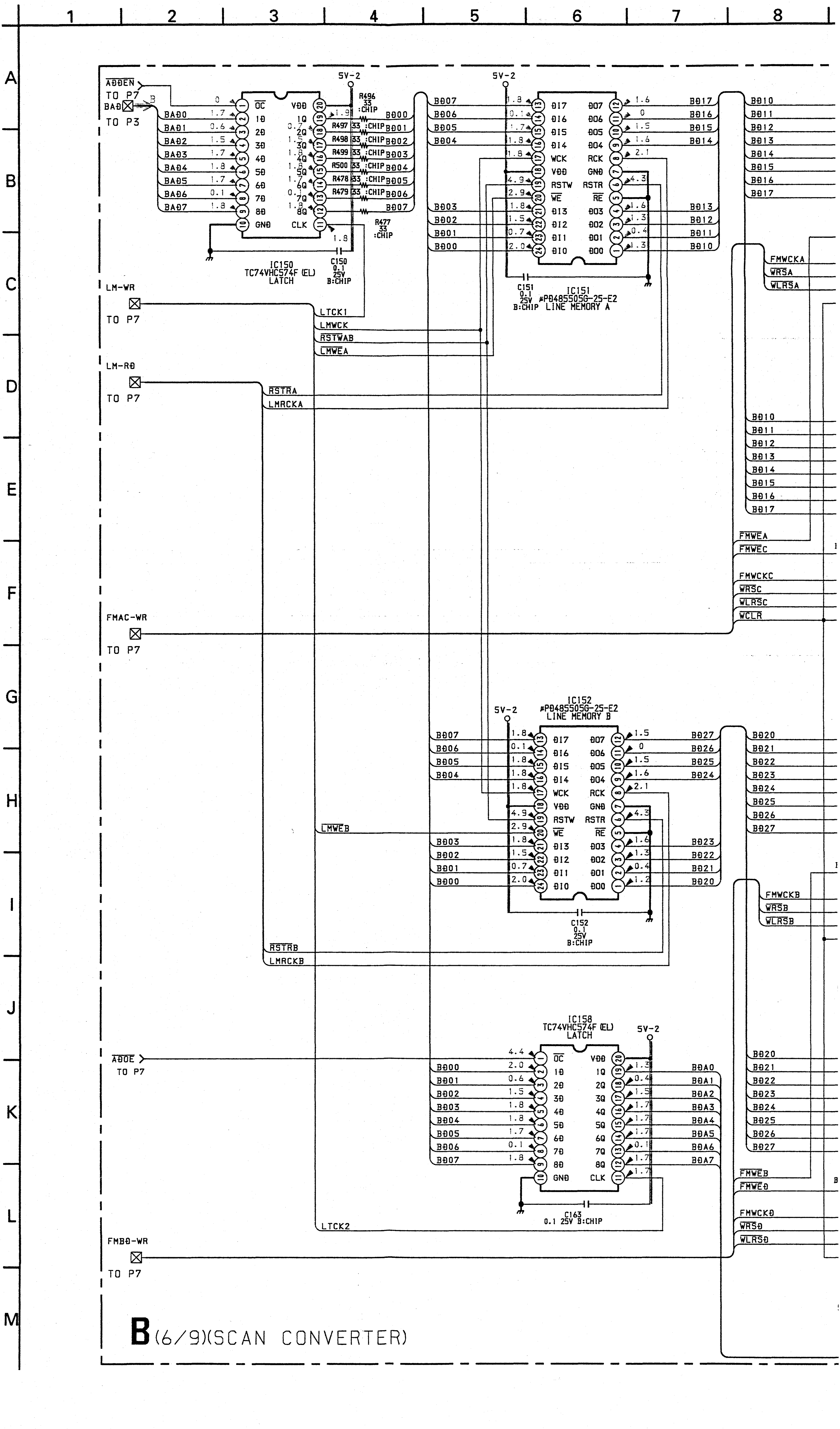

11
12
13
14
15
16
17
18
19
5V-2
IC107
CX8303-105Q
VERTICAL
DIGITAL FILTER
C104 0.1 25V B:CHIP
C140 10 10V :TA-CP
CGRA
FMRCKA
RLRSA
RRSA
CGRC
FMRCKC
RRSC
RLRSC
RCLR
FMAC-RG
TO P7
C111 0.1 25V B:CHIP
C112 0.1 25V B:CHIP
C142 10 10V :TA-CP
C108 0.1 25V B:CHIP
C141 10 10V :TA-CP
CGRB
FMRCKB
RLRSB
C110 0.1 25V B:CHIP
RRSB
CGRG
FMRCKG
RRSG
RLRSG
FMBG-RG
TO P7
TO P7
VGOE
TO P1
G
GGA
ROM-GT
TO P7
COEFLG
LGCK
SGRX
SGTX
SCK
GCS
RGEN
VGF-CTL
MUTE
BLKNG
VGFCK
GEN
B-SS9569<...>-B..-PS

B (5/9) BOARD

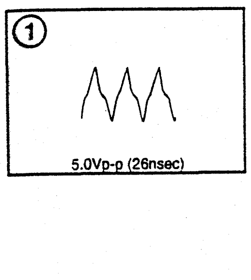


Schematic diagram
← B(5/9) board

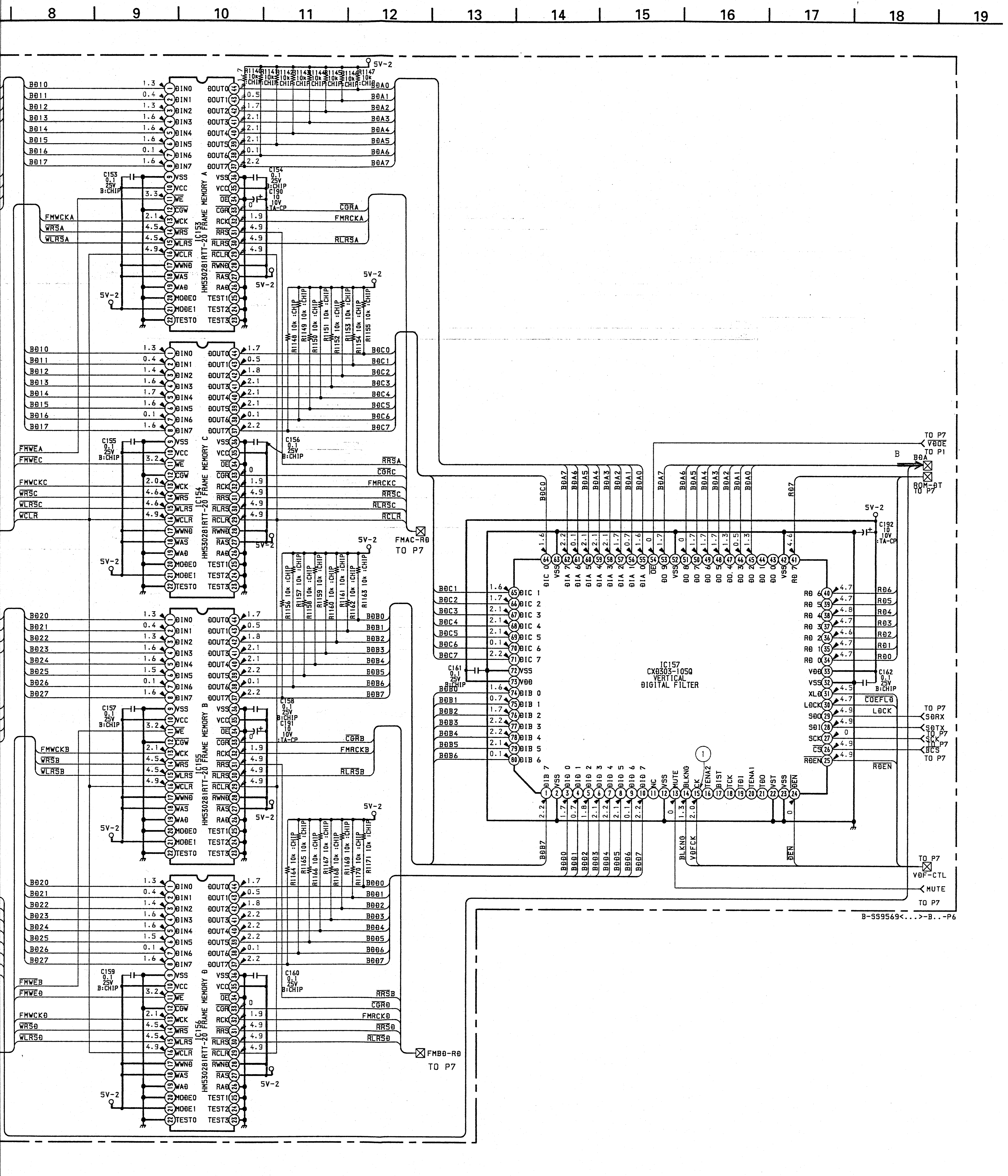
Schematic diagram
B(6/9) board →


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
K
L
M
ADDEN TO P7
BAD TO P3
LM-WR TO P7
LM-RD TO P7
FMAC-WR TO P7
ADOE TO P7
FMBD-WR TO P7
5V-2
IC150 TC74VHC574F (EL) LATCH
C150 0.1 25V B:CHIP
R496 33 :CHIP
R477 33 :CHIP
IC151 μPD485505G-25-E2 LINE MEMORY A
C151 0.1 25V B:CHIP
IC152 μPD485505G-25-E2 LINE MEMORY B
C152 0.1 25V B:CHIP
IC158 TC74VHC574F (EL) LATCH
C163 0.1 25V B:CHIP
LTCK1
LMWCK
RSTWAB
LMWEA
RSTRA
LMRCKA
LMWEB
RSTRB
LMRCKB
LTCK2
FMWCKA
WRSA
WLRSA
FMWEA
FMWEC
FMWCKC
WRSC
WLRSC
WCLR
FMWCKB
WRSB
WLRSB
FMWEB
FMWED
FMWCKD
WRSD
WLRSD
B(6/9)(SCAN CONVERTER)

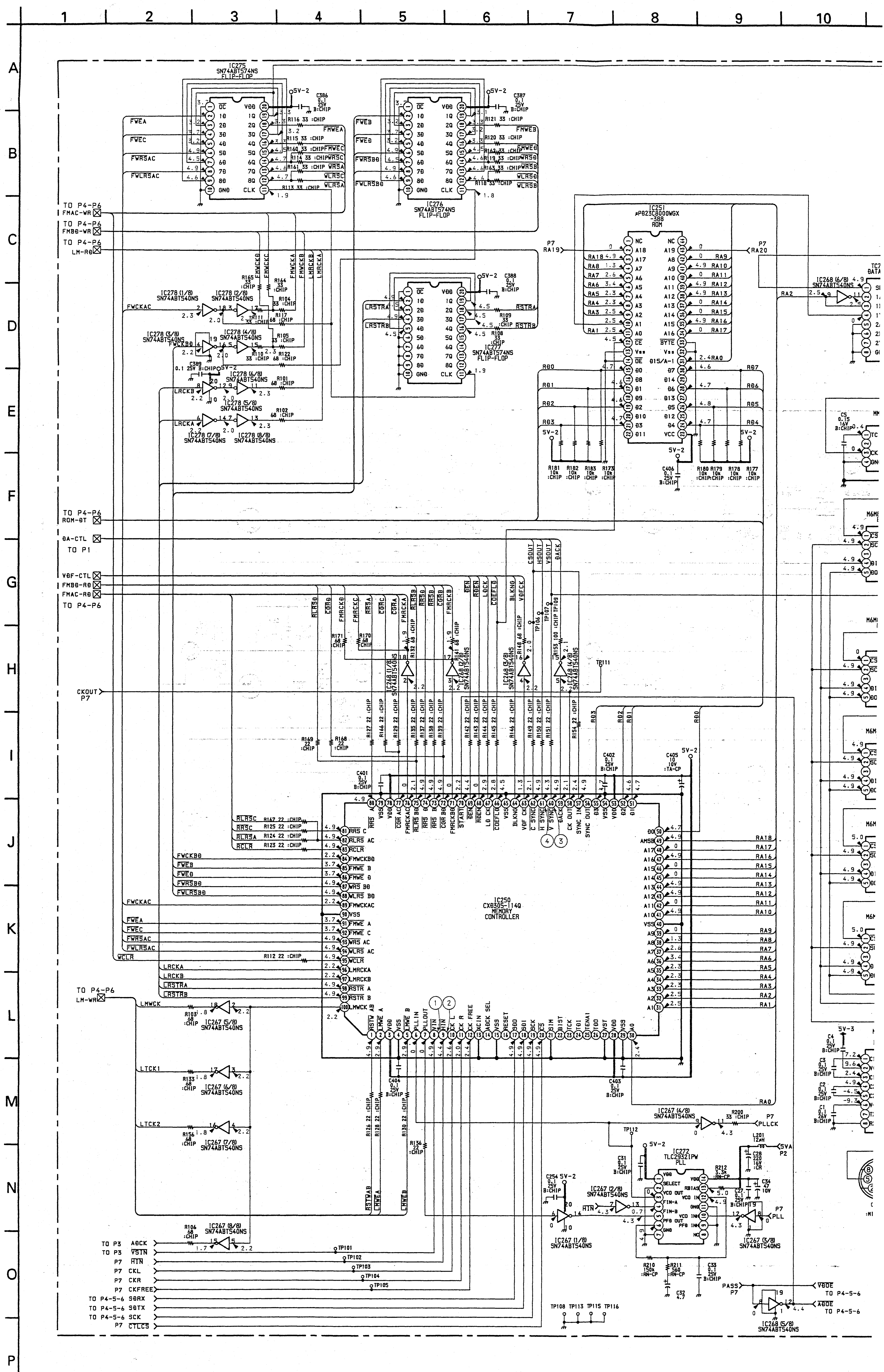
B (6/9) BOARD

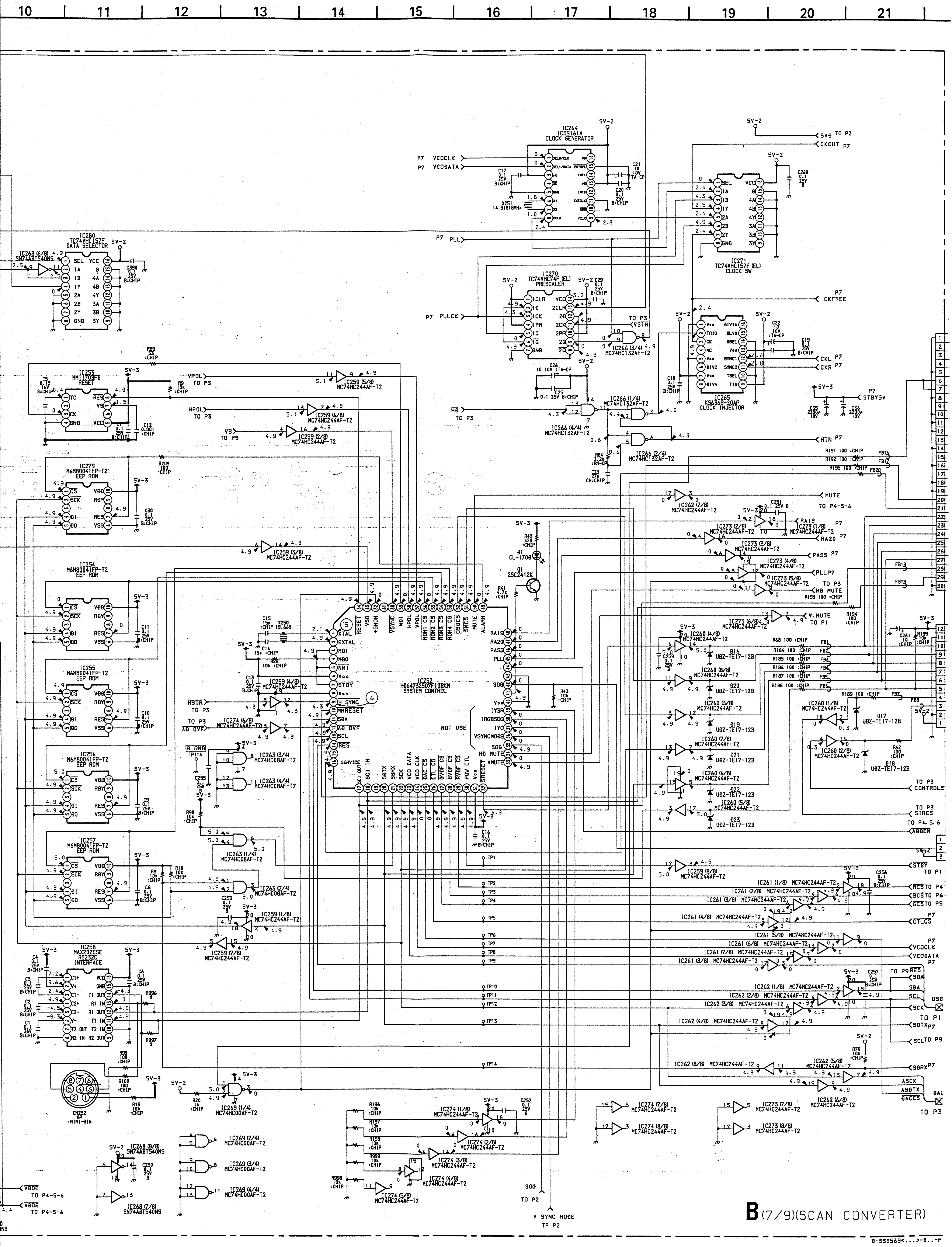


5.0Vp-p (26nsec)



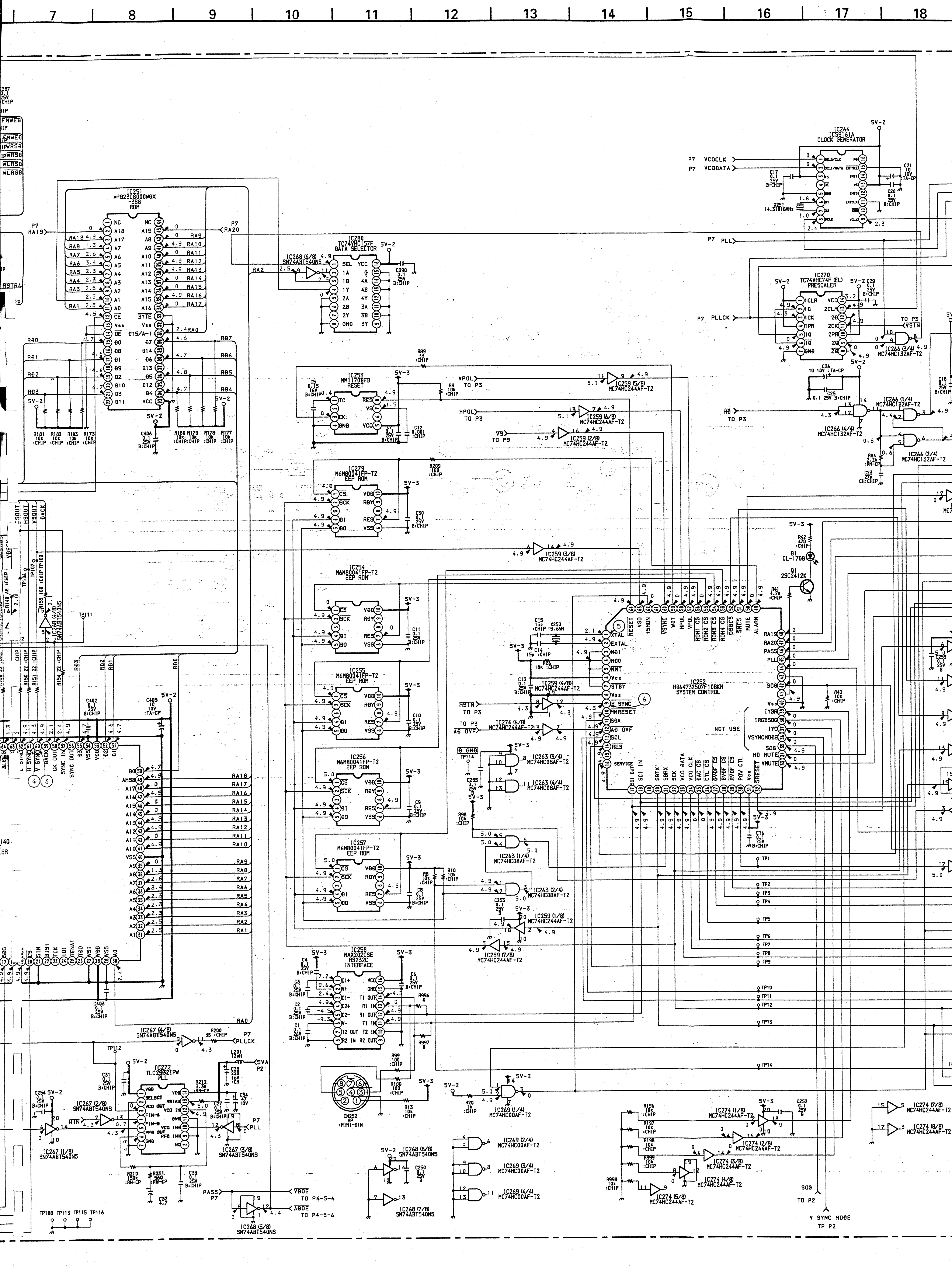
8
9
10
11
12
13
14
15
16
17
18
19
IC153 HM53028IRTT-20 FRAME MEMORY A
IC154 HM53028IRTT-20 FRAME MEMORY C
IC155 HM53028IRTT-20 FRAME MEMORY B
IC156 HM53028IRTT-20 FRAME MEMORY D
IC157 CXD303-105Q VERTICAL DIGITAL FILTER
FMWCKA
WRSA
WLRSA
FMWEA
FMWEC
FMWCKC
WRSC
WLRSC
WCLR
FMWCKB
WRSB
WLRSB
FMWEB
FMWED
FMWCKD
WRSD
WLRSD
CGRA
FMRCKA
RLRSA
RRSA
CGRC
FMRCKC
RRSC
RLRSC
RCLR
CGRB
FMRCKB
RLRSB
RRSB
CGRD
FMRCKD
RRSD
RLRSD
FMAC-RD
TO P7
FMBD-RD
TO P7
5V-2
TO P7
VDOE
TO P1
BOA
ROM-OT
TO P7
TO P7
SDRX
SDTX
TO P7
SCK
TO P7
DCS
TO P7
COEFLD
LOCK
ROEN
TO P7
VDF-CTL
MUTE
TO P7
BLKNG
VDFCK
DEN
B-SS9569<...>-B..-P6

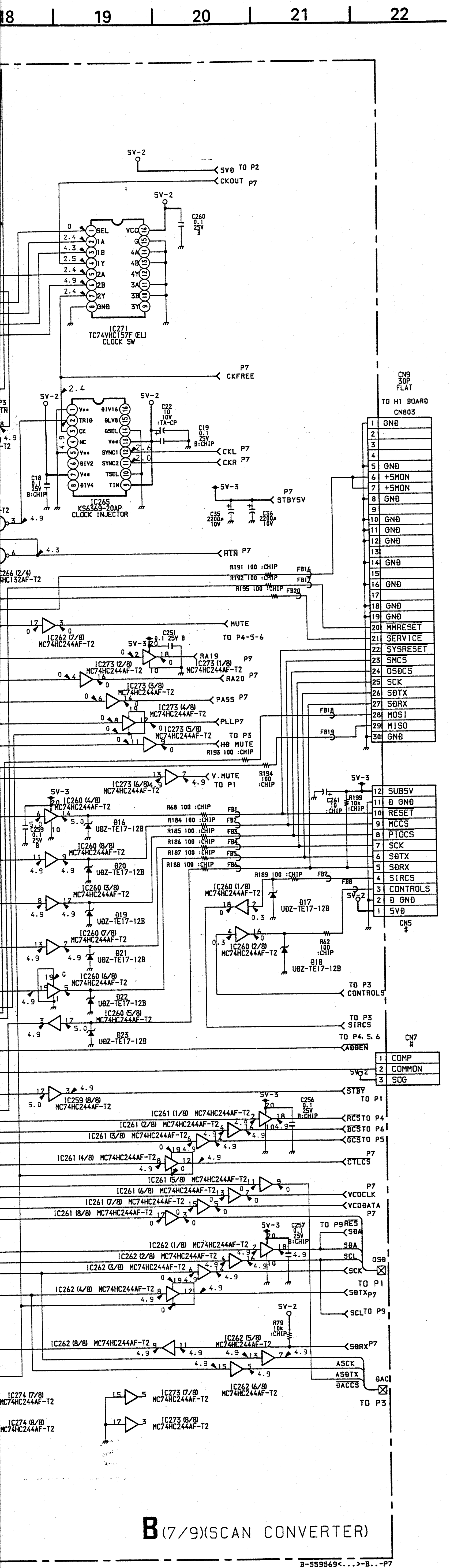

1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
IC275 SN74ABT574NS FLIP-FLOP
IC276 SN74ABT574NS FLIP-FLOP
IC277 SN74ABT574NS FLIP-FLOP
IC251 μPD23C8000WGX -388 ROM
IC250 CXD8305-114Q MEMORY CONTROLLER
IC272 TLC2932IPW PLL
IC278 SN74ABT540NS
IC267 SN74ABT540NS
IC268 SN74ABT540NS
TO P4-P6 FMAC-WR
TO P4-P6 FMB0-WR
TO P4-P6 LM-R0
TO P4-P6 ROM-0T
0A-CTL TO P1
V0F-CTL
FMB0-R0
FMAC-R0
TO P4-P6
CKOUT P7
TO P4-P6 LM-WR
TO P3 A0CK
TO P3 VSIN
P7 HIN
P7 CKL
P7 CKR
P7 CKFREE
TO P4-5-6 S0RX
TO P4-5-6 S0TX
TO P4-5-6 SCK
P7 CTLCS
P7 RA19
P7 RA20
P7 PLLCK
P7 PLL
PASS P7
V0OE TO P4-5-6
A0OE TO P4-5-6
5VA P2
TP101
TP102
TP103
TP104
TP105
TP108 TP113 TP115 TP116


10
11
12
13
14
15
16
17
18
19
20
21
IC264 ICS9161A CLOCK GENERATOR
X251 14.31818MHz
P7 VCOCLK
P7 VCODATA
P7 PLL
P7 PLLCK
IC271 TC74VHC157F (EL) CLOCK SW
IC270 TC74VHC74F (EL) PRESCALER
IC266 (3/4) MC74HC132AF-T2
IC266 (1/4) MC74HC132AF-T2
IC266 (4/4) MC74HC132AF-T2
IC266 (2/4) MC74HC132AF-T2
IC265 KS6369-20AP CLOCK INJECTOR
SV0 TO P2
CKOUT P7
P7 CKFREE
CKL P7
CKR P7
P7 STBYSV
HTN P7
IC280 TC74VHC157F DATA SELECTOR
IC268 (6/8) SN74ABT540NS
IC253 MM1170BFB RESET
IC279 M6M80041FP-T2 EEP ROM
IC254 M6M80041FP-T2 EEP ROM
IC255 M6M80041FP-T2 EEP ROM
IC256 M6M80041FP-T2 EEP ROM
IC257 M6M80041FP-T2 EEP ROM
IC258 MAX202CSE RS232C INTERFACE
CN252 8P :MINI-DIN
IC252 HD6473250F10BKM SYSTEM CONTROL
X250 19.6M
Q1 2SC2412K
D1 CL-170D
IC259 (5/8) MC74HC244AF-T2
IC259 (6/8) MC74HC244AF-T2
IC259 (2/8) MC74HC244AF-T2
IC259 (3/8) MC74HC244AF-T2
IC259 (4/8) MC74HC244AF-T2
IC259 (1/8) MC74HC244AF-T2
IC259 (7/8) MC74HC244AF-T2
IC259 (8/8) MC74HC244AF-T2
IC274 (6/8) MC74HC244AF-T2
IC263 (3/4) MC74HC08AF-T2
IC263 (4/4) MC74HC08AF-T2
IC263 (1/4) MC74HC08AF-T2
IC263 (2/4) MC74HC08AF-T2
IC269 (1/4) MC74HC00AF-T2
IC269 (2/4) MC74HC00AF-T2
IC269 (3/4) MC74HC00AF-T2
IC269 (4/4) MC74HC00AF-T2
IC268 (8/8) SN74ABT540NS
IC268 (7/8) SN74ABT540NS
IC274 (1/8) MC74HC244AF-T2
IC274 (2/8) MC74HC244AF-T2
IC274 (3/8) MC74HC244AF-T2
IC274 (4/8) MC74HC244AF-T2
IC274 (5/8) MC74HC244AF-T2
IC274 (7/8) MC74HC244AF-T2
IC274 (8/8) MC74HC244AF-T2
IC273 (7/8) MC74HC244AF-T2
IC273 (8/8) MC74HC244AF-T2
IC262 (7/8) MC74HC244AF-T2
IC273 (1/8) MC74HC244AF-T2
IC273 (2/8) MC74HC244AF-T2
IC273 (3/8) MC74HC244AF-T2
IC273 (4/8) MC74HC244AF-T2
IC273 (5/8) MC74HC244AF-T2
IC273 (6/8) MC74HC244AF-T2
IC260 (4/8) MC74HC244AF-T2
IC260 (8/8) MC74HC244AF-T2
IC260 (3/8) MC74HC244AF-T2
IC260 (7/8) MC74HC244AF-T2
IC260 (6/8) MC74HC244AF-T2
IC260 (5/8) MC74HC244AF-T2
IC260 (1/8) MC74HC244AF-T2
IC260 (2/8) MC74HC244AF-T2
D16 UDZ-TE17-12B
D17 UDZ-TE17-12B
D18 UDZ-TE17-12B
D19 UDZ-TE17-12B
D20 UDZ-TE17-12B
D21 UDZ-TE17-12B
D22 UDZ-TE17-12B
D23 UDZ-TE17-12B
IC261 (1/8) MC74HC244AF-T2
IC261 (2/8) MC74HC244AF-T2
IC261 (3/8) MC74HC244AF-T2
IC261 (4/8) MC74HC244AF-T2
IC261 (5/8) MC74HC244AF-T2
IC261 (6/8) MC74HC244AF-T2
IC261 (7/8) MC74HC244AF-T2
IC261 (8/8) MC74HC244AF-T2
IC262 (1/8) MC74HC244AF-T2
IC262 (2/8) MC74HC244AF-T2
IC262 (3/8) MC74HC244AF-T2
IC262 (4/8) MC74HC244AF-T2
IC262 (5/8) MC74HC244AF-T2
IC262 (6/8) MC74HC244AF-T2
IC262 (8/8) MC74HC244AF-T2
MUTE TO P4-5-6
RA19 P7
RA20 P7
PASS P7
PLLP7
H0 MUTE TO P3
V.MUTE TO P1
TO P3 CONTROLS
TO P3 SIRCS
TO P4. 5. 6 ADDEN
STBY TO P1
RCS TO P4
BCS TO P6
GCS TO P5
CTLCS
VCOCLK
VCODATA
TO P9 RES
SDA
SCL
SCK TO P1
SDTX P7
SCL TO P9
SDRX P7
ASCK
ASDTX
DACCS TO P3
VDDE TO P4-5-6
ADDE TO P4-5-6
SOG TO P2
V SYNC MODE TP P2

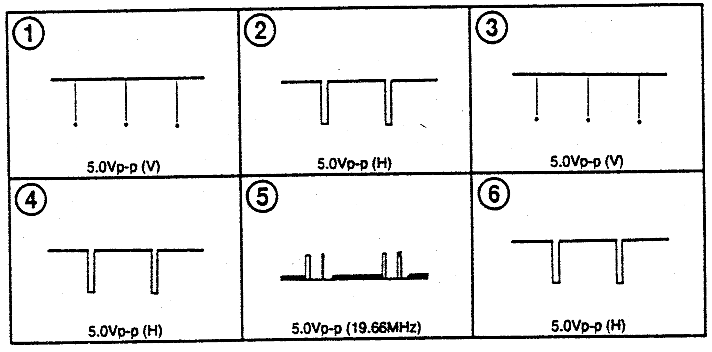
B(7/9)(SCAN CONVERTER)

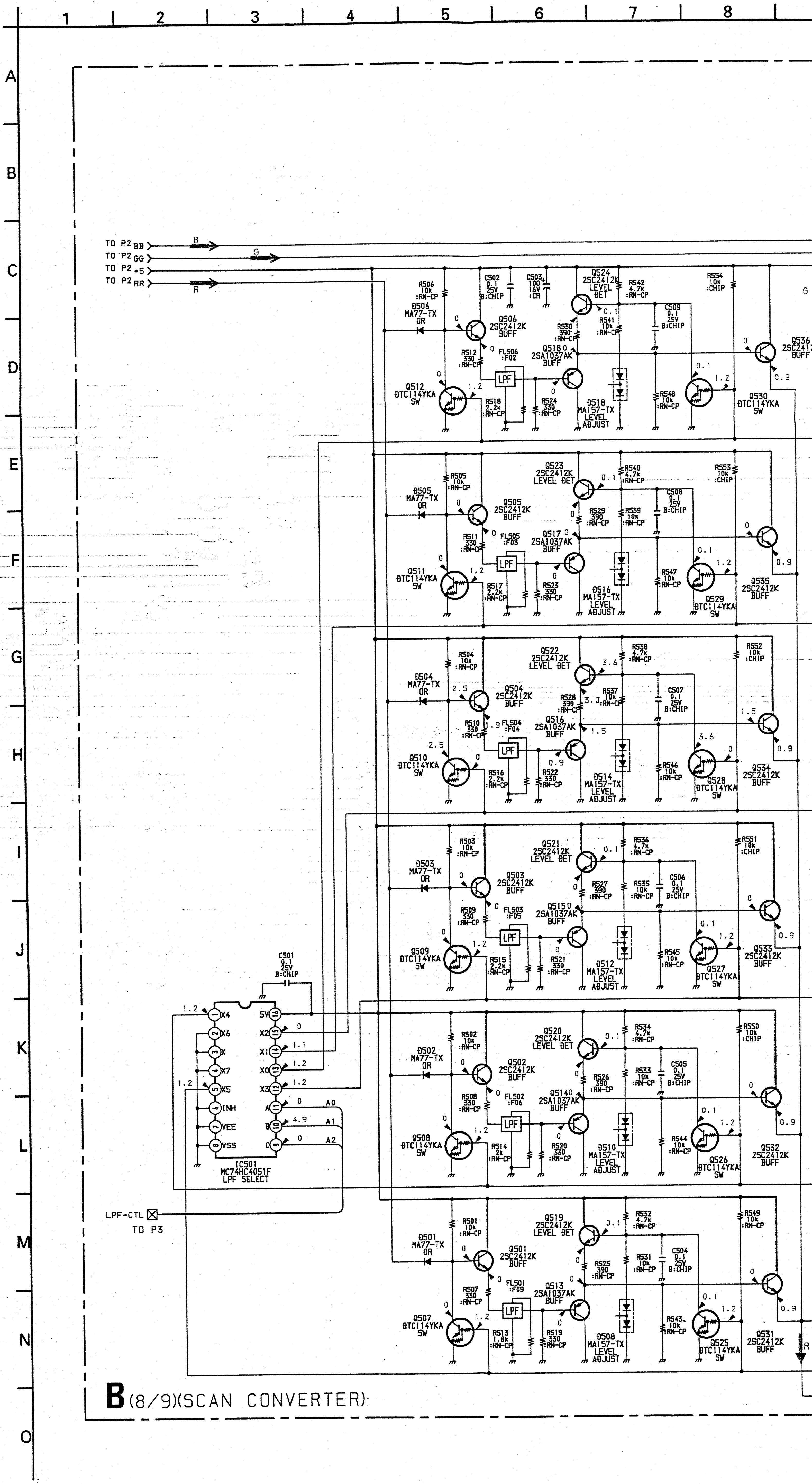
B-SS9569<...>-B..-P


7
8
9
10
11
12
13
14
15
16
17
18
IC251
μPD23C8000WGX
-388
ROM
IC280
TC74VHC157F
DATA SELECTOR
IC264
ICS9161A
CLOCK GENERATOR
IC270
TC74VHC74F (EL)
PRESCALER
IC253
MM1170BFB
RESET
IC279
M6M80041FP-T2
EEP ROM
IC254
M6M80041FP-T2
EEP ROM
IC255
M6M80041FP-T2
EEP ROM
IC256
M6M80041FP-T2
EEP ROM
IC257
M6M80041FP-T2
EEP ROM
IC252
HD6473250 7F10BKM
SYSTEM CONTROL
IC258
MAX202CSE
RS232C
INTERFACE
IC272
TLC2932IPW
PLL
CN252
8P
:MINI-DIN
IC259 (5/8) MC74HC244AF-T2
IC259 (6/8) MC74HC244AF-T2
IC259 (2/8) MC74HC244AF-T2
IC259 (3/8) MC74HC244AF-T2
IC259 (4/8) MC74HC244AF-T2
IC259 (1/8) MC74HC244AF-T2
IC259 (7/8) MC74HC244AF-T2
IC263 (3/4) MC74HC08AF-T2
IC263 (4/4) MC74HC08AF-T2
IC263 (1/4) MC74HC08AF-T2
IC263 (2/4) MC74HC08AF-T2
IC266 (1/4) MC74HC132AF-T2
IC266 (2/4) MC74HC132AF-T2
IC266 (3/4) MC74HC132AF-T2
IC266 (4/4) MC74HC132AF-T2
IC267 (1/8) SN74ABT540NS
IC267 (2/8) SN74ABT540NS
IC267 (3/8) SN74ABT540NS
IC267 (4/8) SN74ABT540NS
IC268 (4/8) SN74ABT540NS
IC268 (5/8) SN74ABT540NS
IC268 (6/8) SN74ABT540NS
IC268 (7/8) SN74ABT540NS
IC268 (8/8) SN74ABT540NS
IC269 (1/4) MC74HC00AF-T2
IC269 (2/4) MC74HC00AF-T2
IC269 (3/4) MC74HC00AF-T2
IC269 (4/4) MC74HC00AF-T2
IC274 (1/8) MC74HC244AF-T2
IC274 (2/8) MC74HC244AF-T2
IC274 (3/8) MC74HC244AF-T2
IC274 (4/8) MC74HC244AF-T2
IC274 (5/8) MC74HC244AF-T2
IC274 (7/8) MC74HC244AF-T2
IC274 (8/8) MC74HC244AF-T2
X251 14.31818MHz
X250 19.66M
D1 CL-170G
Q1 2SC2412K
P7 VCOCLK
P7 VCODATA
P7 PLL
P7 PLLCK
P7 RA19
P7 RA20
VPOL TO P3
HPOL TO P3
VS TO P9
HD TO P3
HSTN TO P3
TO P3 AD OVF
TO P3 VSTN
PASS P7
VBDE TO P4-5-6
ABDE TO P4-5-6
SVA P2
P7 PLLCK
SOG TO P2
V SYNC MODE TP P2
NOT USE
RESET
VSO
+5MON
VSYNC
WDT
HPOL
VPOL
ROM1 CS
ROM2 CS
ROM3 CS
ROM4 CS
OSDCS
SMCS
MUTE
ALARM
XTAL
EXTAL
MD1
MD0
NMI
Vcc
STBY
Vss
H SYNC
MRESET
SDA
AD OVF
SCL
RES
SERVICE
SCI OUT
SCI IN
SDTX
SDRX
SCK
VCO DATA
VCO CLK
DAC CS
CTL CS
OVDF CS
RVDF CS
POW CTL
Vcc
SRESET
RA19
RA20
PASS
PLL
SOG
IYBR
IRGBSOG
IYC
VSYNCMODE
HD MUTE
YMUTE
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP11
TP12
TP13
TP14
TP108
TP109
TP111
TP112
TP113
TP114
TP115
TP116
5V-2
5V-3
D GND


18
19
20
21
22
5V-2
5VD TO P2
CKOUT P7
C260 0.1 25V B
SEL
VCC
1A
1B
1Y
2A
2B
2Y
GND
IC271
TC74VHC157F (EL)
CLOCK SW
CKFREE P7
IC265
KS6369-20AP
CLOCK INJECTOR
CKL P7
CKR P7
5V-3
STBY5V P7
RTN P7
CN9
30P
FLAT
TO H1 BOARD
CN803
1 GND
2
3
4
5 GND
6 +5MON
7 +5MON
8 GND
9
10 GND
11 GND
12 GND
13
14 GND
15
16 GND
17
18 GND
19 GND
20 MMRESET
21 SERVICE
22 SYSRESET
23 SMCS
24 OSDCS
25 SCK
26 SDTX
27 SDRX
28 MOSI
29 MISO
30 GND
MUTE TO P4-5-6
RA19 P7
RA20 P7
PASS P7
PLLP7
H8 MUTE TO P3
V.MUTE TO P1
12 SUBSV
11 D GND
10 RESET
9 MCCS
8 PIOCS
7 SCK
6 SDTX
5 SDRX
4 SIRCS
3 CONTROLS
2 D GND
1 5VD
CN5
TO P3 CONTROLS
TO P3 SIRCS
TO P4, 5, 6 ADDEN
CN7
1 COMP
2 COMMON
3 SOG
STBY TO P1
RCS TO P4
BCS TO P6
GCS TO P5
CTLCS P7
VCOCLK P7
VCODATA P7
TO P9 RES
SDA
SCL
SCK
OSD
SDTX TO P1 P7
SCL TO P9
SDRX P7
ASCK
ASDTX
DACCS
DAC
TO P3
B (7/9)(SCAN CONVERTER)
B-SS9569<...>-B..-P7

B (7/9) BOARD

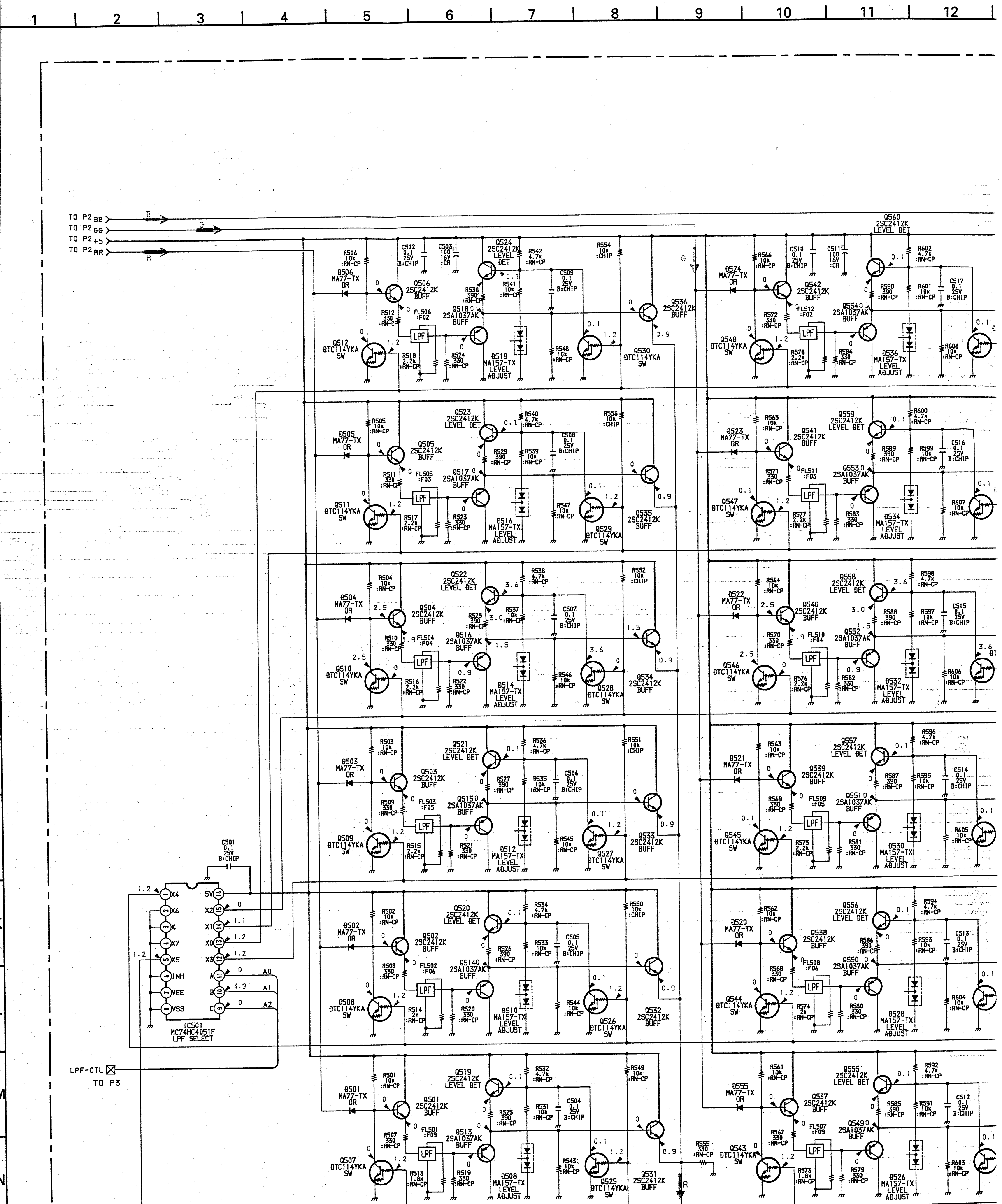

①
5.0Vp-p (V)
②
5.0Vp-p (H)
③
5.0Vp-p (V)
④
5.0Vp-p (H)
⑤
5.0Vp-p (19.66MHz)
⑥
5.0Vp-p (H)


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
TO P2 BB
TO P2 GG
TO P2 +5
TO P2 RR
B
G
R
Q524 2SC2412K LEVEL DET
Q506 2SC2412K BUFF
Q518 2SA1037AK BUFF
Q512 DTC114YKA SW
D506 MA77-TX OR
D518 MA157-TX LEVEL ADJUST
Q530 DTC114YKA SW
Q536 2SC2412K BUFF
Q523 2SC2412K LEVEL DET
Q505 2SC2412K BUFF
Q517 2SA1037AK BUFF
Q511 DTC114YKA SW
D505 MA77-TX OR
D516 MA157-TX LEVEL ADJUST
Q529 DTC114YKA SW
Q535 2SC2412K BUFF
Q522 2SC2412K LEVEL DET
Q504 2SC2412K BUFF
Q516 2SA1037AK BUFF
Q510 DTC114YKA SW
D504 MA77-TX OR
D514 MA157-TX LEVEL ADJUST
Q528 DTC114YKA SW
Q534 2SC2412K BUFF
Q521 2SC2412K LEVEL DET
Q503 2SC2412K BUFF
Q515 2SA1037AK BUFF
Q509 DTC114YKA SW
D503 MA77-TX OR
D512 MA157-TX LEVEL ADJUST
Q527 DTC114YKA SW
Q533 2SC2412K BUFF
Q520 2SC2412K LEVEL DET
Q502 2SC2412K BUFF
Q514 2SA1037AK BUFF
Q508 DTC114YKA SW
D502 MA77-TX OR
D510 MA157-TX LEVEL ADJUST
Q526 DTC114YKA SW
Q532 2SC2412K BUFF
Q519 2SC2412K LEVEL DET
Q501 2SC2412K BUFF
Q513 2SA1037AK BUFF
Q507 DTC114YKA SW
D501 MA77-TX OR
D508 MA157-TX LEVEL ADJUST
Q525 DTC114YKA SW
Q531 2SC2412K BUFF
LPF
FL506 :F02
FL505 :F03
FL504 :F04
FL503 :F05
FL502 :F06
FL501 :F09
C501 0.1 25V B:CHIP
IC501 MC74HC4051F LPF SELECT
X4
X6
X
X7
X5
INH
VEE
VSS
5V
X2
X1
X0
X3
A
B
C
A0
A1
A2
LPF-CTL
TO P3

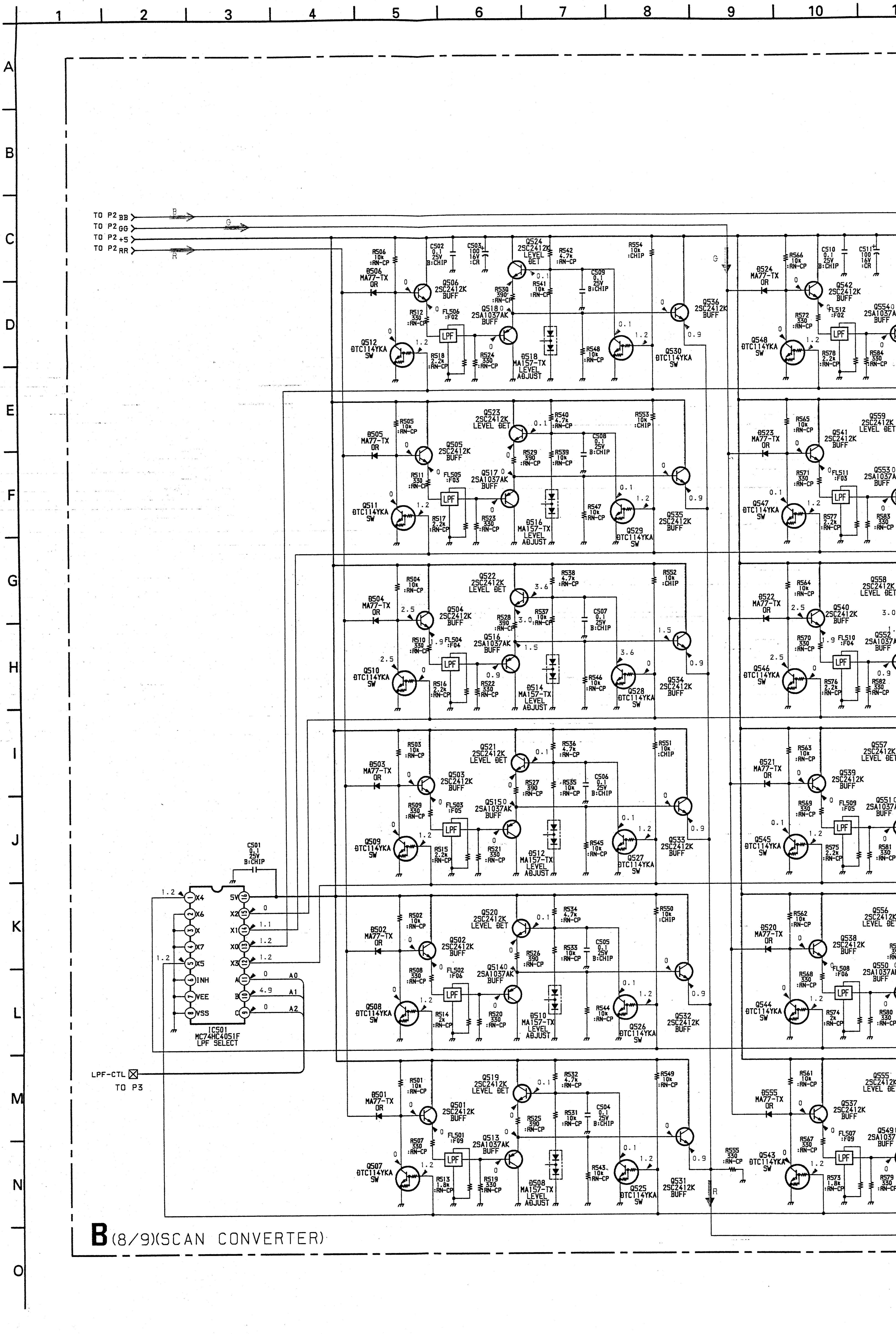
B(8/9)(SCAN CONVERTER)

tic diagram

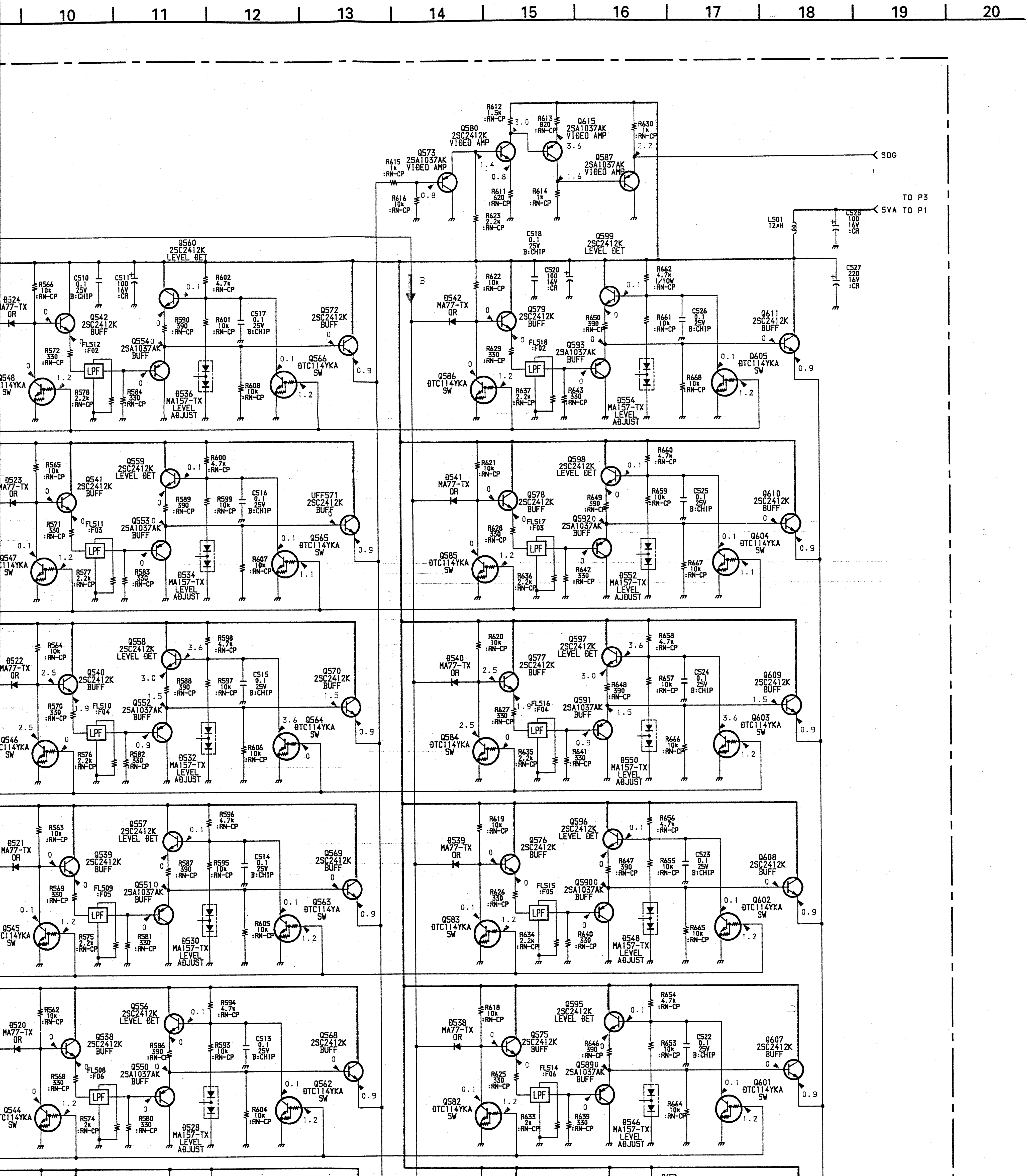
oard ➡

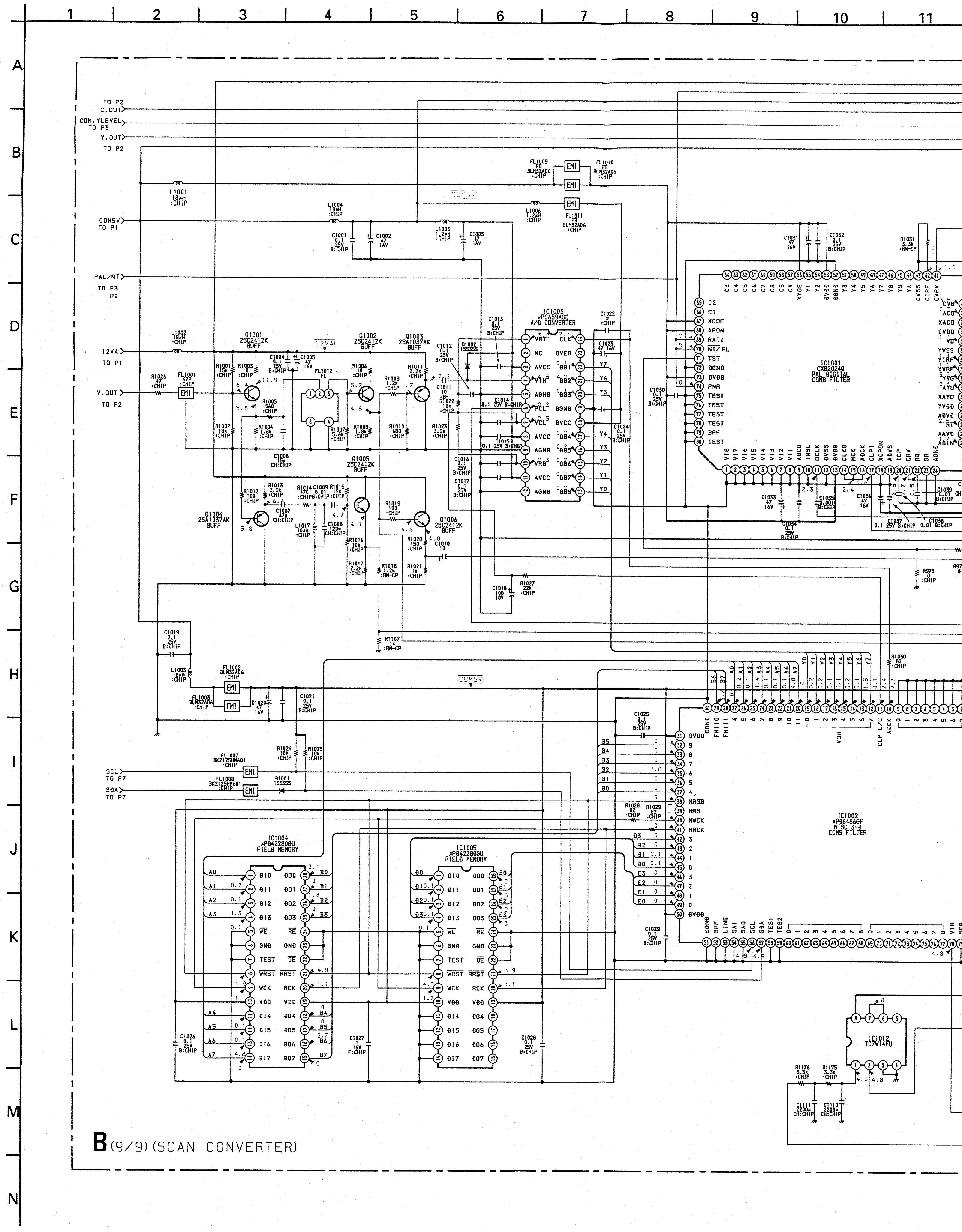

1
2
3
4
5
6
7
8
9
10
11
12
TO P2 BB
TO P2 GG
TO P2 +5
TO P2 RR
B
G
R
IC501
MC74HC4051F
LPF SELECT
X4
X6
X
X7
X5
INH
VEE
VSS
5V
X2
X1
X0
X3
A
B
C
A0
A1
A2
C501
0.1
25V
B:CHIP
LPF-CTL
TO P3
Q506 2SC2412K BUFF
Q512 BTC114YKA SW
Q524 2SC2412K LEVEL BET
Q518 2SA1037AK BUFF
Q530 BTC114YKA SW
Q536 2SC2412K BUFF
D506 MA77-TX OR
D518 MA157-TX LEVEL ADJUST
FL506 :F02
LPF
Q505 2SC2412K BUFF
Q511 BTC114YKA SW
Q523 2SC2412K LEVEL BET
Q517 2SA1037AK BUFF
Q529 BTC114YKA SW
Q535 2SC2412K BUFF
D505 MA77-TX OR
D516 MA157-TX LEVEL ADJUST
FL505 :F03
Q504 2SC2412K BUFF
Q510 BTC114YKA SW
Q522 2SC2412K LEVEL BET
Q516 2SA1037AK BUFF
Q528 BTC114YKA SW
Q534 2SC2412K BUFF
D504 MA77-TX OR
D514 MA157-TX LEVEL ADJUST
FL504 :F04
Q503 2SC2412K BUFF
Q509 BTC114YKA SW
Q521 2SC2412K LEVEL BET
Q515 2SA1037AK BUFF
Q527 BTC114YKA SW
Q533 2SC2412K BUFF
D503 MA77-TX OR
D512 MA157-TX LEVEL ADJUST
FL503 :F05
Q502 2SC2412K BUFF
Q508 BTC114YKA SW
Q520 2SC2412K LEVEL BET
Q514 2SA1037AK BUFF
Q526 BTC114YKA SW
Q532 2SC2412K BUFF
D502 MA77-TX OR
D510 MA157-TX LEVEL ADJUST
FL502 :F06
Q501 2SC2412K BUFF
Q507 BTC114YKA SW
Q519 2SC2412K LEVEL BET
Q513 2SA1037AK BUFF
Q525 BTC114YKA SW
Q531 2SC2412K BUFF
D501 MA77-TX OR
D508 MA157-TX LEVEL ADJUST
FL501 :F09
R555 330 :RN-CP
Q560 2SC2412K LEVEL BET
Q542 2SC2412K BUFF
Q548 BTC114YKA SW
Q554 2SA1037AK BUFF
D524 MA77-TX OR
D536 MA157-TX LEVEL ADJUST
FL512 :F02
Q559 2SC2412K LEVEL BET
Q541 2SC2412K BUFF
Q547 BTC114YKA SW
Q553 2SA1037AK BUFF
D523 MA77-TX OR
D534 MA157-TX LEVEL ADJUST
FL511 :F03
Q558 2SC2412K LEVEL BET
Q540 2SC2412K BUFF
Q546 BTC114YKA SW
Q552 2SA1037AK BUFF
D522 MA77-TX OR
D532 MA157-TX LEVEL ADJUST
FL510 :F04
Q557 2SC2412K LEVEL BET
Q539 2SC2412K BUFF
Q545 BTC114YKA SW
Q551 2SA1037AK BUFF
D521 MA77-TX OR
D530 MA157-TX LEVEL ADJUST
FL509 :F05
Q556 2SC2412K LEVEL BET
Q538 2SC2412K BUFF
Q544 BTC114YKA SW
Q550 2SA1037AK BUFF
D520 MA77-TX OR
D528 MA157-TX LEVEL ADJUST
FL508 :F06
Q555 2SC2412K LEVEL BET
Q537 2SC2412K BUFF
Q543 BTC114YKA SW
Q549 2SA1037AK BUFF
D555 MA77-TX OR
D526 MA157-TX LEVEL ADJUST
FL507 :F09

B(8/9)(SCAN CONVERTER)

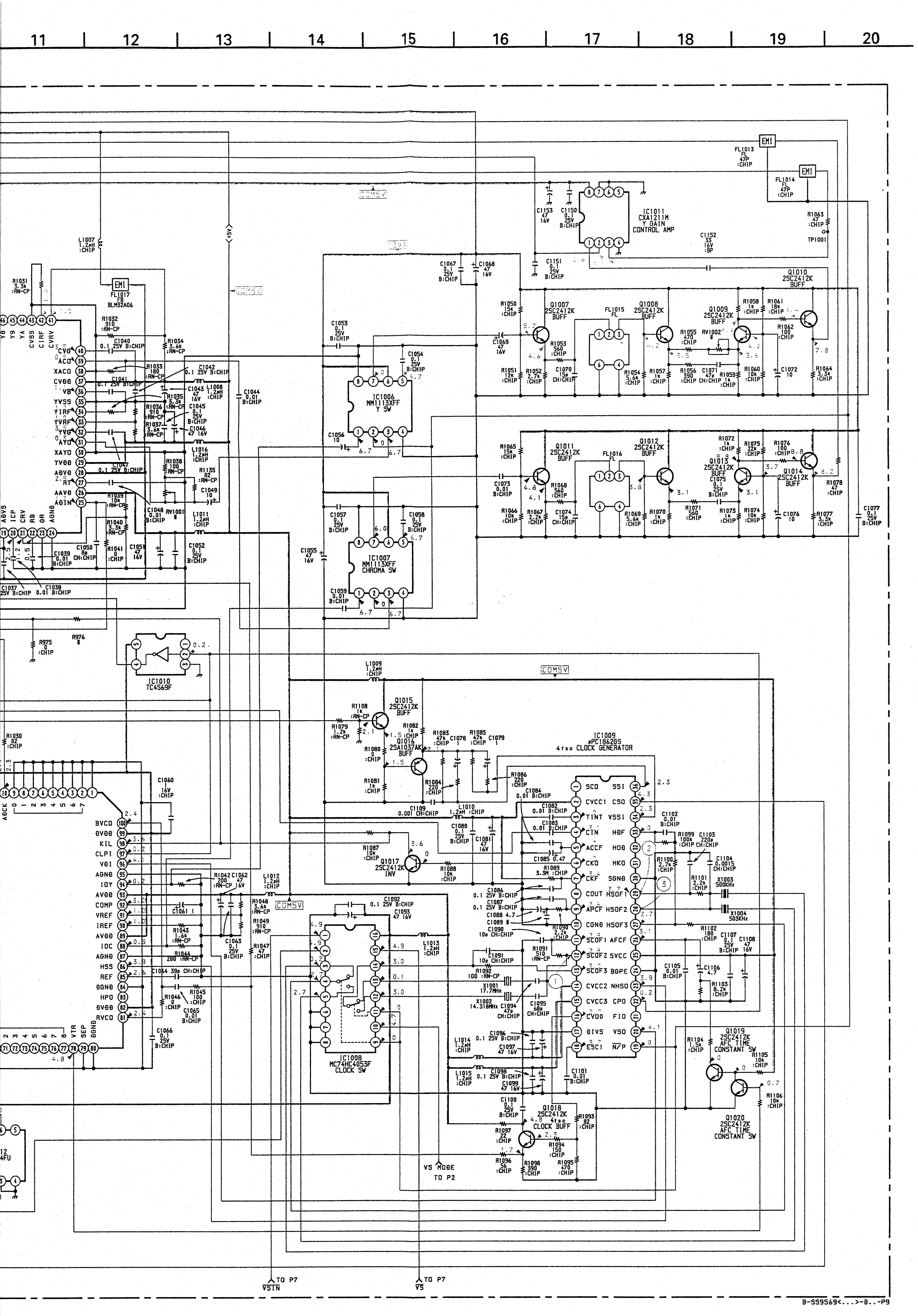

1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
TO P2 BB
TO P2 GG
TO P2 +5
TO P2 RR
B
G
R
Q524 2SC2412K LEVEL DET
Q506 2SC2412K BUFF
Q518 2SA1037AK BUFF
Q512 DTC114YKA SW
D506 MA77-TX OR
D518 MA157-TX LEVEL ADJUST
Q530 DTC114YKA SW
Q536 2SC2412K BUFF
FL506 :F02
Q523 2SC2412K LEVEL DET
Q505 2SC2412K BUFF
Q517 2SA1037AK BUFF
Q511 DTC114YKA SW
D505 MA77-TX OR
D516 MA157-TX LEVEL ADJUST
Q529 DTC114YKA SW
Q535 2SC2412K BUFF
FL505 :F03
Q522 2SC2412K LEVEL DET
Q504 2SC2412K BUFF
Q516 2SA1037AK BUFF
Q510 DTC114YKA SW
D504 MA77-TX OR
D514 MA157-TX LEVEL ADJUST
Q528 DTC114YKA SW
Q534 2SC2412K BUFF
FL504 :F04
Q521 2SC2412K LEVEL DET
Q503 2SC2412K BUFF
Q515 2SA1037AK BUFF
Q509 DTC114YKA SW
D503 MA77-TX OR
D512 MA157-TX LEVEL ADJUST
Q527 DTC114YKA SW
Q533 2SC2412K BUFF
FL503 :F05
Q520 2SC2412K LEVEL DET
Q502 2SC2412K BUFF
Q514 2SA1037AK BUFF
Q508 DTC114YKA SW
D502 MA77-TX OR
D510 MA157-TX LEVEL ADJUST
Q526 DTC114YKA SW
Q532 2SC2412K BUFF
FL502 :F06
Q519 2SC2412K LEVEL DET
Q501 2SC2412K BUFF
Q513 2SA1037AK BUFF
Q507 DTC114YKA SW
D501 MA77-TX OR
D508 MA157-TX LEVEL ADJUST
Q525 DTC114YKA SW
Q531 2SC2412K BUFF
FL501 :F09
LPF
C501 0.1 25V B:CHIP
IC501 MC74HC4051F LPF SELECT
X4
X6
X
X7
X5
INH
VEE
VSS
5V
X2
X1
X0
X3
A
B
C
A0
A1
A2
LPF-CTL
TO P3
R555 330 :RN-CP
Q542 2SC2412K BUFF
Q548 DTC114YKA SW
D524 MA77-TX OR
FL512 :F02
Q541 2SC2412K BUFF
Q547 DTC114YKA SW
D523 MA77-TX OR
Q559 2SC2412K LEVEL DET
Q553 2SA1037AK BUFF
FL511 :F03
Q540 2SC2412K BUFF
Q546 DTC114YKA SW
D522 MA77-TX OR
Q558 2SC2412K LEVEL DET
Q552 2SA1037AK BUFF
FL510 :F04
Q539 2SC2412K BUFF
Q545 DTC114YKA SW
D521 MA77-TX OR
Q557 2SC2412K LEVEL DET
Q551 2SA1037AK BUFF
FL509 :F05
Q538 2SC2412K BUFF
Q544 DTC114YKA SW
D520 MA77-TX OR
Q556 2SC2412K LEVEL DET
Q550 2SA1037AK BUFF
FL508 :F06
Q537 2SC2412K BUFF
Q543 DTC114YKA SW
D555 MA77-TX OR
Q555 2SC2412K LEVEL DET
Q549 2SA1037 BUFF
FL507 :F09

B (8/9)(SCAN CONVERTER)

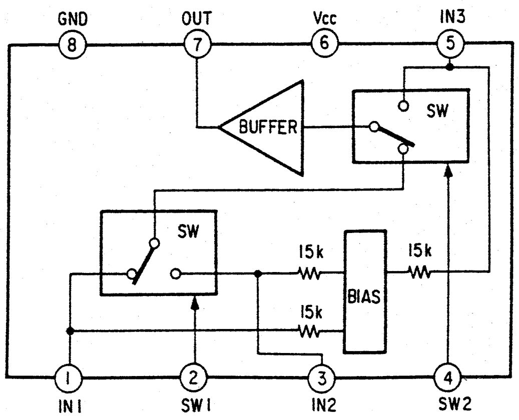

10
11
12
13
14
15
16
17
18
19
20
R612 1.5k :RN-CP
R613 820 :RN-CP
Q615 2SA1037AK VIDEO AMP
R630 1k :RN-CP
Q580 2SC2412K VIDEO AMP
Q573 2SA1037AK VIDEO AMP
R615 1k :RN-CP
Q587 2SA1037AK VIDEO AMP
R616 10k :RN-CP
R611 620 :RN-CP
R614 1k :RN-CP
R623 2.2k :RN-CP
SOG
TO P3
SVA TO P1
L501 12μH
C528 100 16V :CR
C527 220 16V :CR
C518 0.1 25V B:CHIP
Q599 2SC2412K LEVEL DET
Q560 2SC2412K LEVEL DET
R566 10k :RN-CP
C510 0.1 25V B:CHIP
C511 100 16V :CR
R602 4.7k :RN-CP
Q542 2SC2412K BUFF
R590 390 :RN-CP
R601 10k :RN-CP
C517 0.1 25V B:CHIP
Q572 2SC2412K BUFF
FL512 :F02
Q554 2SA1037AK BUFF
Q566 DTC114YKA SW
R572 330 :RN-CP
LPF
R578 2.2k :RN-CP
R584 330 :RN-CP
D536 MA157-TX LEVEL ADJUST
R608 10k :RN-CP
D542 MA77-TX OR
R622 10k :RN-CP
C520 100 16V :CR
R662 4.7k 1/10W :RN-CP
Q579 2SC2412K BUFF
R650 390 :RN-CP
R661 10k :RN-CP
C526 0.1 25V B:CHIP
Q611 2SC2412K BUFF
FL518 :F02
Q593 2SA1037AK BUFF
R629 330 :RN-CP
Q605 DTC114YKA SW
Q586 DTC114YKA SW
R637 2.2k :RN-CP
R643 330 :RN-CP
D554 MA157-TX LEVEL ADJUST
R668 10k :RN-CP
Q559 2SC2412K LEVEL DET
R565 10k :RN-CP
R600 4.7k :RN-CP
Q541 2SC2412K BUFF
R589 390 :RN-CP
R599 10k :RN-CP
C516 0.1 25V B:CHIP
UFF571 2SC2412K BUFF
FL511 :F03
Q553 2SA1037AK BUFF
Q565 DTC114YKA SW
R571 330 :RN-CP
R577 2.2k :RN-CP
R583 330 :RN-CP
D534 MA157-TX LEVEL ADJUST
R607 10k :RN-CP
R621 10k :RN-CP
D541 MA77-TX OR
Q598 2SC2412K LEVEL DET
R660 4.7k :RN-CP
Q578 2SC2412K BUFF
R649 390 :RN-CP
R659 10k :RN-CP
C525 0.1 25V B:CHIP
Q610 2SC2412K BUFF
FL517 :F03
Q592 2SA1037AK BUFF
R628 330 :RN-CP
Q604 DTC114YKA SW
Q585 DTC114YKA SW
R636 2.2k :RN-CP
R642 330 :RN-CP
D552 MA157-TX LEVEL ADJUST
R667 10k :RN-CP
Q558 2SC2412K LEVEL DET
R564 10k :RN-CP
R598 4.7k :RN-CP
Q540 2SC2412K BUFF
R588 390 :RN-CP
R597 10k :RN-CP
C515 0.1 25V B:CHIP
Q570 2SC2412K BUFF
FL510 :F04
Q552 2SA1037AK BUFF
Q564 DTC114YKA SW
R570 330 :RN-CP
R576 2.2k :RN-CP
R582 330 :RN-CP
D532 MA157-TX LEVEL ADJUST
R606 10k :RN-CP
R620 10k :RN-CP
D540 MA77-TX OR
Q597 2SC2412K LEVEL DET
R658 4.7k :RN-CP
Q577 2SC2412K BUFF
R648 390 :RN-CP
R657 10k :RN-CP
C524 0.1 25V B:CHIP
Q609 2SC2412K BUFF
FL516 :F04
Q591 2SA1037AK BUFF
R627 330 :RN-CP
Q603 DTC114YKA SW
Q584 DTC114YKA SW
R635 2.2k :RN-CP
R641 330 :RN-CP
D550 MA157-TX LEVEL ADJUST
R666 10k :RN-CP
Q557 2SC2412K LEVEL DET
R563 10k :RN-CP
R596 4.7k :RN-CP
Q539 2SC2412K BUFF
R587 390 :RN-CP
R595 10k :RN-CP
C514 0.1 25V B:CHIP
Q569 2SC2412K BUFF
FL509 :F05
Q551 2SA1037AK BUFF
Q563 DTC114YA SW
R569 330 :RN-CP
R575 2.2k :RN-CP
R581 330 :RN-CP
D530 MA157-TX LEVEL ADJUST
R605 10k :RN-CP
R619 10k :RN-CP
D539 MA77-TX OR
Q596 2SC2412K LEVEL DET
R656 4.7k :RN-CP
Q576 2SC2412K BUFF
R647 390 :RN-CP
R655 10k :RN-CP
C523 0.1 25V B:CHIP
Q608 2SC2412K BUFF
FL515 :F05
Q590 2SA1037AK BUFF
R626 330 :RN-CP
Q602 DTC114YKA SW
Q583 DTC114YKA SW
R634 2.2k :RN-CP
R640 330 :RN-CP
D548 MA157-TX LEVEL ADJUST
R665 10k :RN-CP
Q556 2SC2412K LEVEL DET
R562 10k :RN-CP
R594 4.7k :RN-CP
Q538 2SC2412K BUFF
R586 390 :RN-CP
R593 10k :RN-CP
C513 0.1 25V B:CHIP
Q568 2SC2412K BUFF
FL508 :F06
Q550 2SA1037AK BUFF
Q562 DTC114YKA SW
R568 330 :RN-CP
R574 2k :RN-CP
R580 330 :RN-CP
D528 MA157-TX LEVEL ADJUST
R604 10k :RN-CP
R618 10k :RN-CP
D538 MA77-TX OR
Q595 2SC2412K LEVEL DET
R654 4.7k :RN-CP
Q575 2SC2412K BUFF
R646 390 :RN-CP
R653 10k :RN-CP
C522 0.1 25V B:CHIP
Q607 2SC2412K BUFF
FL514 :F06
Q589 2SA1037AK BUFF
R625 330 :RN-CP
Q601 DTC114YKA SW
Q582 DTC114YKA SW
R633 2k :RN-CP
R639 330 :RN-CP
D546 MA157-TX LEVEL ADJUST
R664 10k :RN-CP
Q555 2SC2412K LEVEL DET
R561 10k :RN-CP
R592 4.7k :RN-CP
Q537 2SC2412K BUFF
R585 390 :RN-CP
R591 10k :RN-CP
C512 0.1 25V B:CHIP
Q567 2SC2412K BUFF
FL507 :F09
Q549 2SA1037AK BUFF
Q561 DTC114YKA SW
R567 330 :RN-CP
R573 1.8k :RN-CP
R579 330 :RN-CP
D526 MA157-TX LEVEL ADJUST
R603 10k :RN-CP
R609 330 :RN-CP
R617 10k :RN-CP
D537 MA77-TX OR
Q594 2SC2412K LEVEL DET
R652 4.7k :RN-CP
Q574 2SC2412K BUFF
R645 390 :RN-CP
R651 10k :RN-CP
C521 0.1 25V B:CHIP
Q606 2SC2412K BUFF
FL513 :F09
Q588 2SA1037AK BUFF
R624 330 :RN-CP
Q600 DTC114YKA SW
Q581 DTC114YKA SW
R632 1.8k :RN-CP
R638 330 :RN-CP
D544 MA157-TX LEVEL ADJUST
R663 10k :RN-CP
R669 330 :RN-CP
B TO P3
G TO P3
R TO P3
B-SS9569<...>-B..-P8


TO P2 C.OUT
COM.YLEVEL TO P3
Y.OUT TO P2
COM5V TO P1
PAL/NT TO P3 P2
12VA TO P1
V.OUT TO P2
SCL TO P7
SDA TO P7
IC1003 μPC659AGC A/D CONVERTER
IC1001 CXD2024Q PAL DIGITAL COMB FILTER
IC1002 μPD64486GF NTSC 3-D COMB FILTER
IC1004 μPD42280GU FIELD MEMORY
IC1005 μPD42280GU FIELD MEMORY
IC1012 TC7W14FU
Q1001 2SC2412K BUFF
Q1002 2SC2412K BUFF
Q1003 2SA1037AK BUFF
Q1004 2SA1037AK BUFF
Q1005 2SC2412K BUFF
Q1006 2SC2412K BUFF
D1001 1SS355
D1002 1SS355
COM5V
12VA

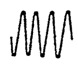
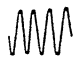
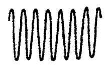
B (9/9) (SCAN CONVERTER)


11
12
13
14
15
16
17
18
19
20
IC1011 CXA1211M Y GAIN CONTROL AMP
FL1013 FL 47P :CHIP
FL1014 FL 47P :CHIP
EMI
TP1001
Q1007 2SC2412K BUFF
Q1008 2SC2412K BUFF
Q1009 2SC2412K BUFF
Q1010 2SC2412K BUFF
Q1011 2SC2412K BUFF
Q1012 2SC2412K BUFF
Q1013 2SC2412K BUFF
Q1014 2SC2412K BUFF
FL1015 FL
FL1016 FL
IC1006 MM1113XFF Y SW
IC1007 MM1113XFF CHROMA SW
FL1017 FB BLM32A06
IC1010 TC4S69F
COMSV
Q1015 2SC2412K BUFF
Q1016 2SA1037AK BUFF
Q1017 2SC2412K INV
IC1009 μPC1862GS 4fsc CLOCK GENERATOR
SCO
CVCC1
TINT
CIN
ACCF
CKO
CKF
COUT
APCF
CGND
SCOF1
SCOF2
SCOF3
CVCC2
CVCC3
CVDD
DIVS
ESC1
SSI
CSO
VSSI
HDF
HOG
HKO
SGND
HSOF1
HSOF2
HSOF3
AFCF
SVCC
BGPE
NHSO
CPO
FIO
VSO
N/P
X1001 17.7MHz
X1002 14.318MHz
X1003 500KHz
X1004 503KHz
IC1008 MC74HC4053F CLOCK SW
Q1018 2SC2412K 4fsc CLOCK BUFF
Q1019 2SC2412K AFC TIME CONSTANT SW
Q1020 2SC2412K AFC TIME CONSTANT SW
VS MODE TO P2
TO P7 VSTN
TO P7 VS
BVCO
BVDD
KIL
CLPI
VGI
AGND
IOY
AVDD
COMP
VREF
IREF
AVDD
IOC
AGND
HSS
REF
BGND
HPO
BVDD
RVCO
VTR
SEP
BGND
B-SS9569<...>-B..-P9

B (9/9) BOARD IC1006, IC1007 CXA1113XFF


GND
8
OUT
7
Vcc
6
IN3
5
BUFFER
SW
SW
15k
15k
15k
BIAS
1
IN1
2
SW1
3
IN2
4
SW2

B (9/9) BOARD

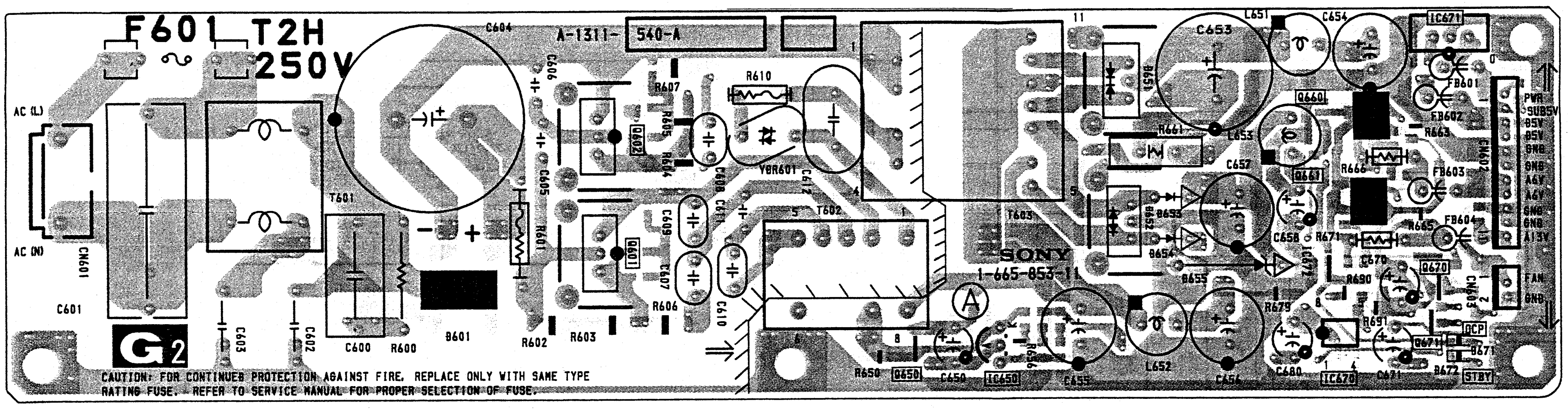
①	②	③
		
0.7Vp-p (14.318MHz)	0.4Vp-p (500KHz)	0.7Vp-p (503kHz)

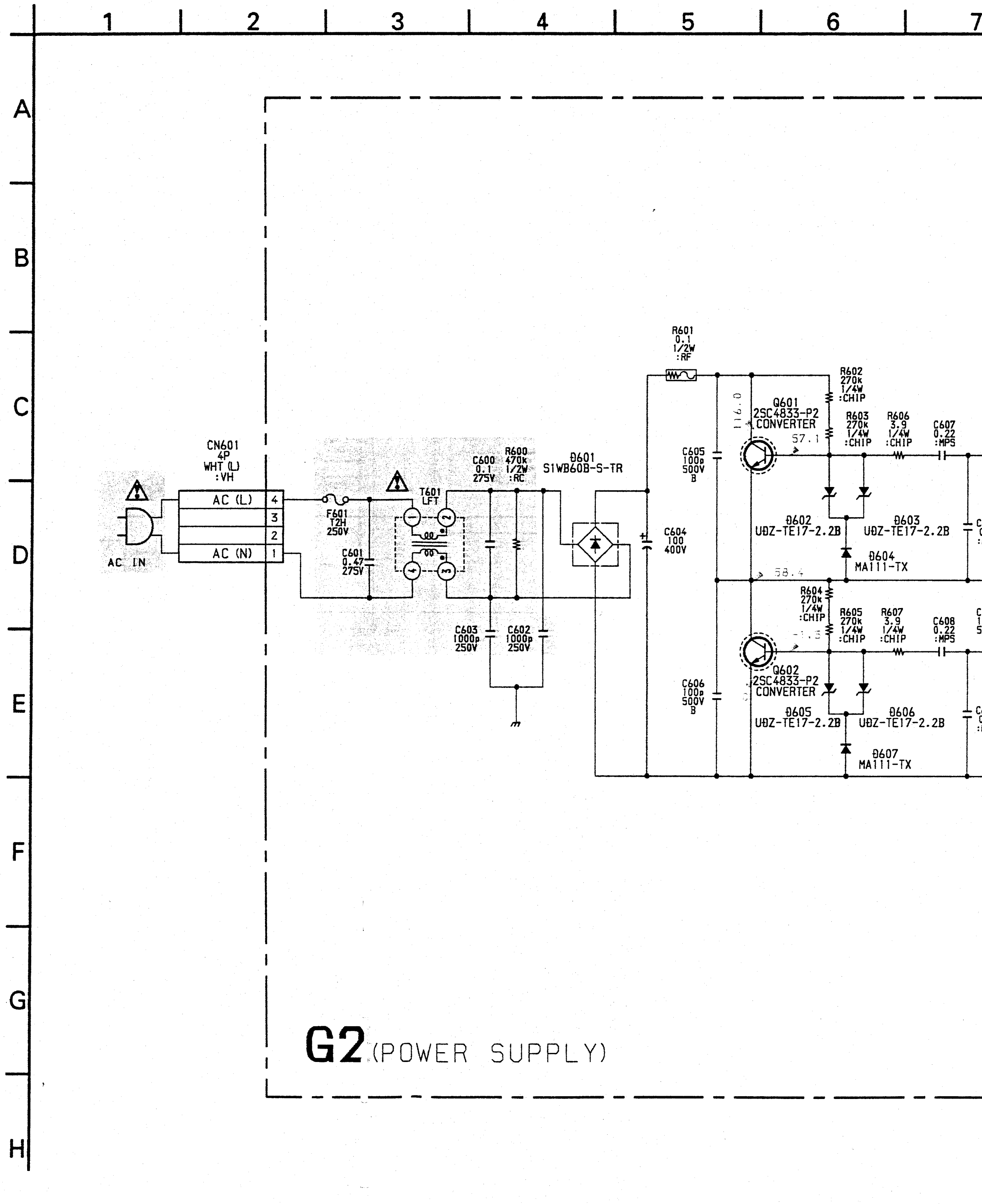
Schematic diagram
← B(9/9) board

Schematic diagram
G2 board →

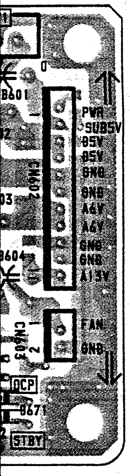
G2 [POWER SUPPLY]

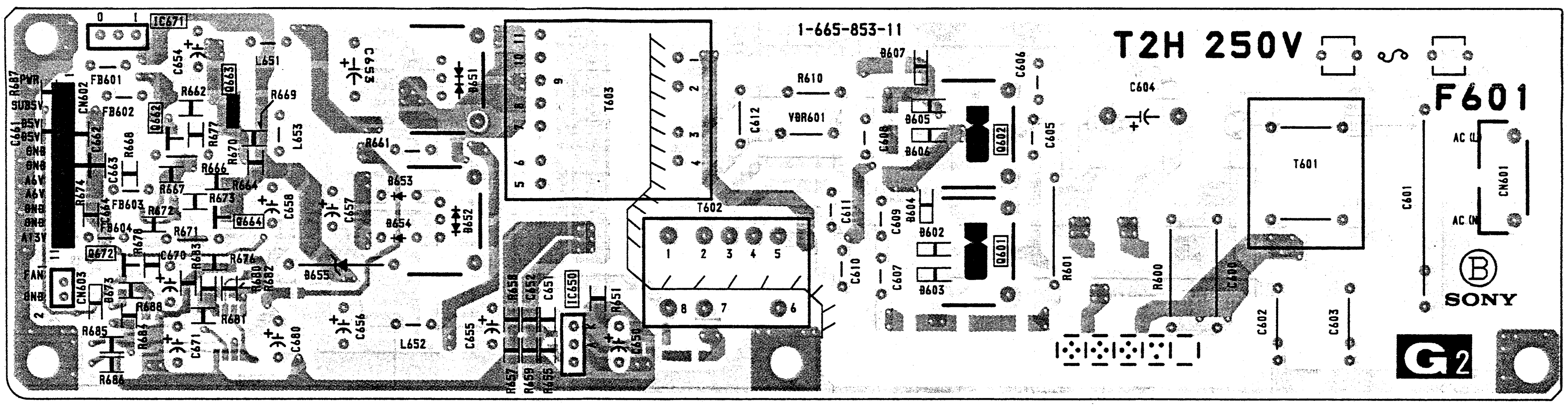
– **G2 BOARD** – <Component Side>


F601 T2H 250V
AC (L)
AC (N)
CN601
C601
T601
C603
C602
C600
R600
D601
R601
R602
R603
C604
C605
C606
R607
R610
VDR601
C612
T602
T603
SONY 1-665-853-11
C653
C654
L651
IC671
L652
C655
C656
C650
IC650
R650
Q650
IC670
CN602
CN603
PWR
SUBSV
5V
GND
16V
13V
FAN
OCP
STBY
G2
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE, REPLACE ONLY WITH SAME TYPE RATING FUSE. REFER TO SERVICE MANUAL FOR PROPER SELECTION OF FUSE.

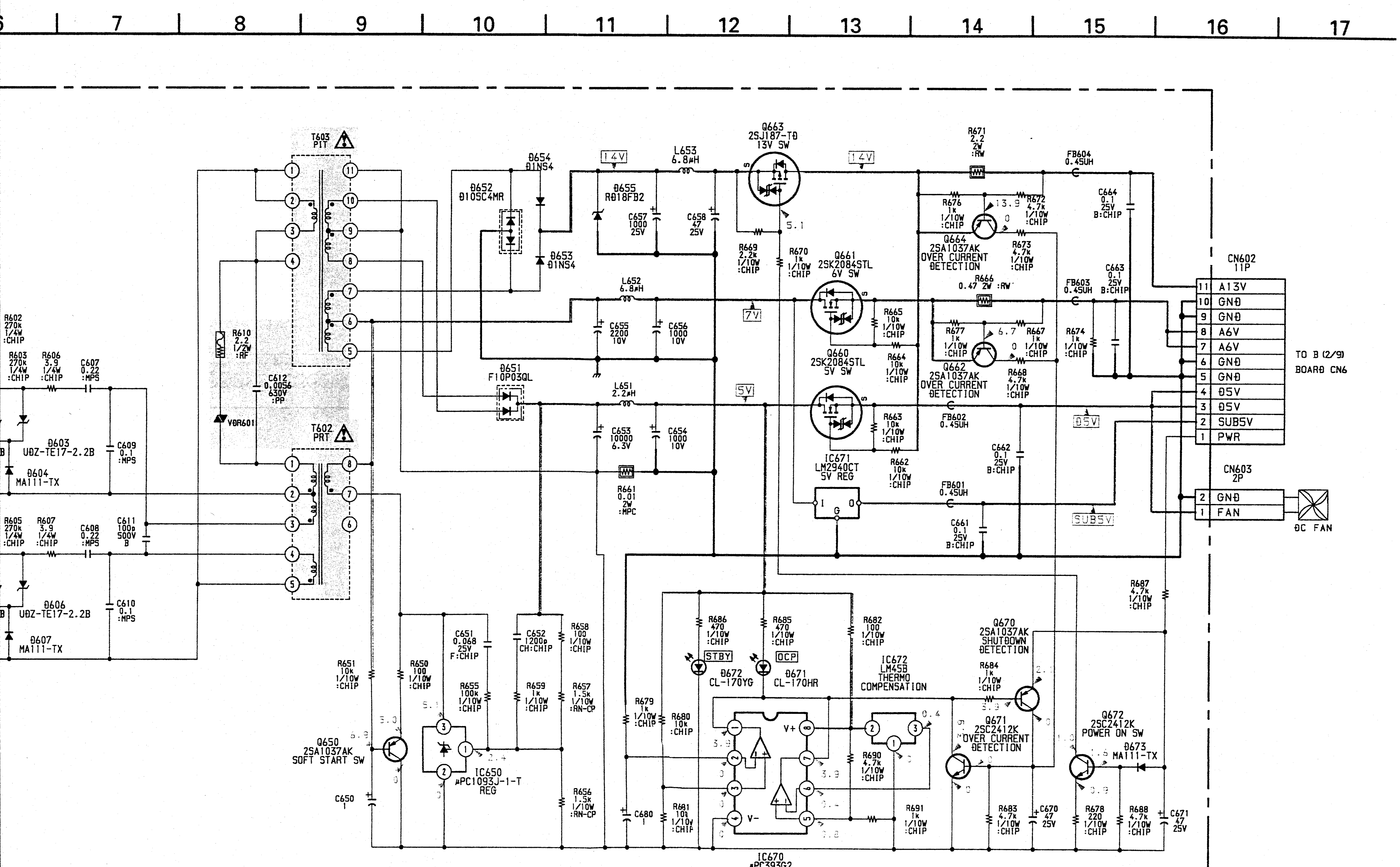

1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
CN601 4P WHT (L) :VH
AC (L)
AC (N)
AC IN
F601 T2H 250V
C601 0.47 275V
T601 LFT
C600 0.1 275V
R600 470k 1/2W :RC
D601 S1WB60B-S-TR
C603 1000p 250V
C602 1000p 250V
R601 0.1 1/2W :RF
C605 100p 500V B
C604 100 400V
C606 100p 500V B
R602 270k 1/4W :CHIP
Q601 2SC4833-P2 CONVERTER
R603 270k 1/4W :CHIP
R606 3.9 1/4W :CHIP
C607 0.22 :MPS
D602 UDZ-TE17-2.2B
D603 UDZ-TE17-2.2B
D604 MA111-TX
R604 270k 1/4W :CHIP
R605 270k 1/4W :CHIP
R607 3.9 1/4W :CHIP
C608 0.22 :MPS
Q602 2SC4833-P2 CONVERTER
D605 UDZ-TE17-2.2B
D606 UDZ-TE17-2.2B
D607 MA111-TX
G2 (POWER SUPPLY)

<Conductor Side>



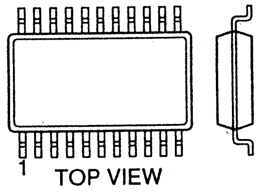

1-665-853-11
T2H 250V
F601
T601
T602
T603
CN601
CN602
CN603
IC671
IC650
VDR601
SONY
G2

- ▨ : Pattern from the side which enables seeing.
- ▨ : Pattern of the rear side.


6
7
8
9
10
11
12
13
14
15
16
17
T603 PIT
T602 PRT
D654 D1NS4
D652 D10SC4MR
D653 D1NS4
D655 RD18FB2
D651 F10P03QL
L653 6.8μH
L652 6.8μH
L651 2.2μH
Q663 2SJ187-TD 13V SW
Q661 2SK2084STL 6V SW
Q660 2SK2084STL 5V SW
IC671 LM2940CT 5V REG
Q664 2SA1037AK OVER CURRENT DETECTION
Q662 2SA1037AK OVER CURRENT DETECTION
FB604 0.45UH
FB603 0.45UH
FB602 0.45UH
FB601 0.45UH
R671 2.2 2W :RW
R666 0.47 2W :RW
R661 0.01 2W :MPC
CN602 11P
A13V
GND
A6V
D5V
SUBSV
PWR
TO B (2/9) BOARD CN6
CN603 2P
FAN
DC FAN
14V
7V
5V
D5V
SUBSV
Q650 2SA1037AK SOFT START SW
IC650 μPC1093J-1-T REG
D672 CL-170YG
D671 CL-170HR
STBY
OCP
IC672 LM45B THERMO COMPENSATION
IC670 μPC393G2 COMPARATOR
Q670 2SA1037AK SHUTDOWN DETECTION
Q671 2SC2412K OVER CURRENT DETECTION
Q672 2SC2412K POWER ON SW
D673 MA111-TX
D603 UDZ-TE17-2.2B
D604 MA111-TX
D606 UDZ-TE17-2.2B
D607 MA111-TX
R610 2.2 1/2W :RF
C612 0.0056 630V :PP
VDR601
B-559569<...>-G2.

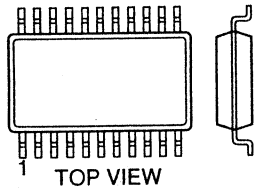
8-5. SEMICONDUCTORS

BA10358F
CXA1211M
LM2903M
MM1113XFBE
MM1113XFF
MM1114XFBE
NJM2903M
NJM4558M
TC4W53FU
TC7W14FU
µPC393G2
µPC4558G2
X25040SI
X25040S-C7000
24LC21T/SN



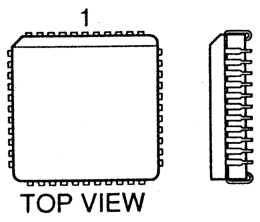
8pin SOP

BA7657F
DAC8840FS
DAC8840FSR
TA8184F
µPC659AGS



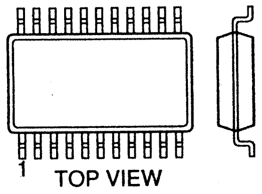
24pin SOP

BT121KPJ80



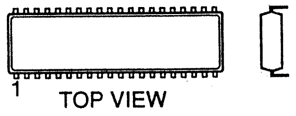
44pin QFJ

CXA1315M
HD14053BFP
MAX202CSE
MC14053BF
MC74HC4051F
MC74HC4052F
MC74HC4053F
MC74HC4538AF
MC74HC4538F
TC74VHC157F



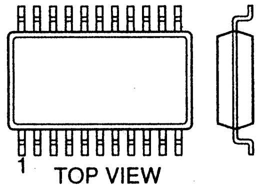
16pin SOP

CXA1387S



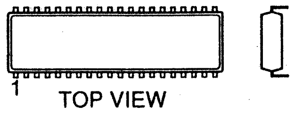
30pin DIP

CXA1470AM
µPD42280GU-30



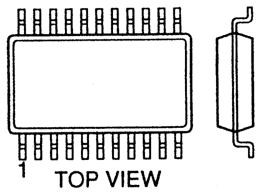
28pin SOP

CXA1526P
ICS9161A-01CW16T
KS6369-20AP
MAX232CPE
MAX232N
SN74LS221N
TDA4665T-T



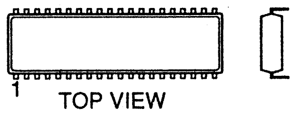
16pin DIP

CXA1726M



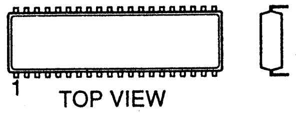
30pin SOP

CXA1739S



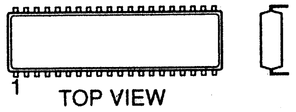
48pin DIP

CXA1779P
M62353FP



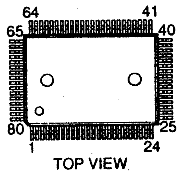
28pin DIP

CXA2016S
L7856

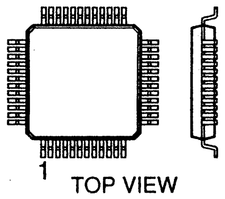


22pin DIP

CXD2024AQ
CXD303-105Q

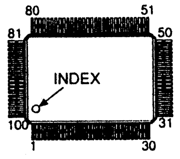

64
41
65
40
80
25
1
24
TOP VIEW

CXD2302Q

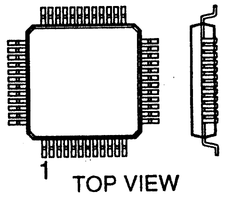


32pin QFP

CXD305-114Q
µPD6486GF-3BA

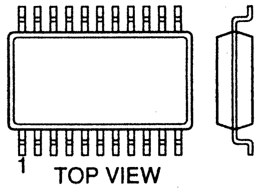

80
51
81
50
INDEX
100
31
1
30

HD64732507F10-BKM



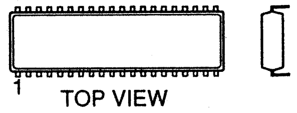
64pin QFP

HM530281RTT-20
HM530281-20
µPD23C8000WGX-388



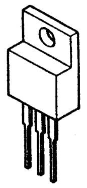
44pin SOP

LA7856A

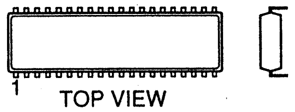


18pin DIP

LM2940CT-12FL91
LM2940CT-5.0
NJM7805FA
NJM78M05FA
NJM7809FA
NJM78M09FA
NJM7812FA
NJM7912FA
PWR-TOP200YAI
TA7812S
µPC24MIZAHF
µPC2405HF
XRA178M05T

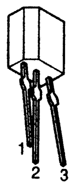


LM358P
LM393P
MM1170BFB
NJM2903D
µPC358C
µPC393C

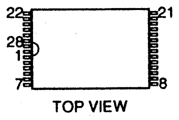


8pin DIP

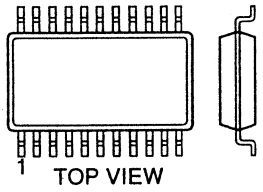
LM45BIM3X



MC68HC05P7BSC402191B

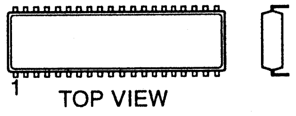

22
21
28
1
7
8
TOP VIEW

MC74HC00AF
MC74HC04AF
MC74HC08AF
MC74HC11F
MC74HC14AF
MC74HC125AF
MC74HC132AF
MC74HC30F
MC74HC4078F
SN74HC14ANS
TC74VHC74F
TLC2932IPW



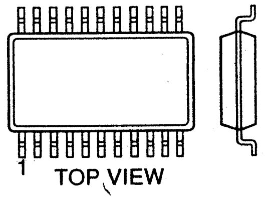
14pin SOP

MC74HC00AN
SN74HC00AN
SN74HC86AN



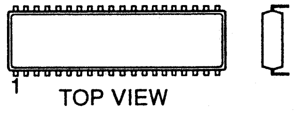
14pin DIP

MC74HC244AF
M62352GP-75E
M62352GP-75EC
SN74ABT540NS
SN74ABT574NS
TC74VHC574F
µPD6453GT-625



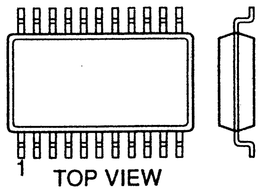
20pin SOP

M52036SP



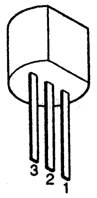
20pin DIP

M6M80041FP

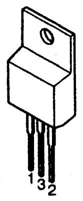


10pin SOP

NJM78L09UA
TA78L009AP-TPE6
TA78L09F-TE12L
TA78L09S

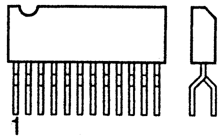


NJM79M05FA



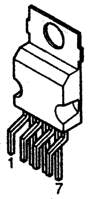
STR-S3115

MARKING SIDE VIEW

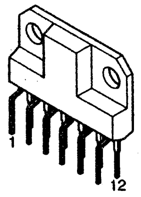


9pin ZIP

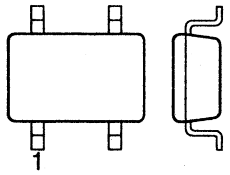
STR-M6524
STV9379



TA8200AH
TA8216H

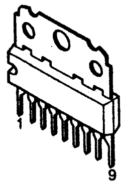


TC4S69F
TC7S08FU
TC7W08FU

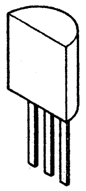


5pin CHIP

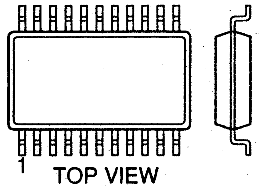
TDA6111Q/N4



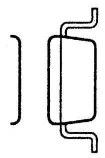
TL431CLP
µPC1093J-1-T



µPC1830GT

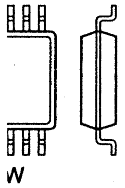


42pin SOP

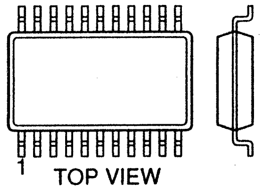


4

T

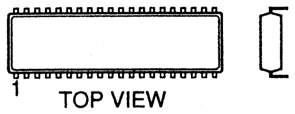


µPC1862GS



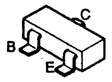
36pin SOP

µPD485505G-25

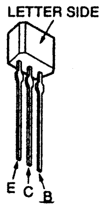


24pin DIP

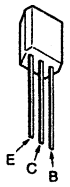
DTA114EK
DTA124YKA
DTA144EK
DTA144EKA
DTC114YKA
DTC144EK
DTC144EKA
2SA1036K
2SA1037K
2SA1037AK
2SA1162-G
2SA1309A
2SC1623-L5L6
2SC2412K



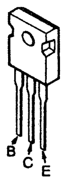
DTC124ESA
2SA1175-HFE
2SC2785-HFE
2SC3311A


LETTER SIDE
E C B

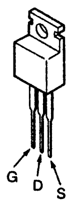
DTC144ES



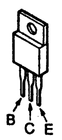
FS10SM-18A-A8



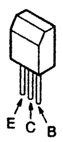
IRF840
2SK552



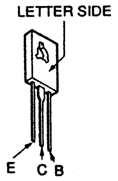
2SB1565EF
2SD2394-EF



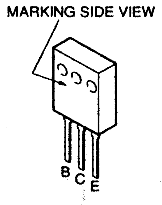
2SB733-34
2SB734-T-4
2SB734-T-34
2SD774-34
2SD774-T-34



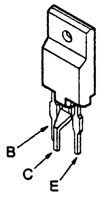
2SC2688-LK


LETTER SIDE
E C B

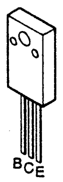
2SC3997CA


MARKING SIDE VIEW
B C E

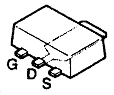
2SC4632LS-CB7



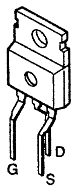
2SC4833S-P2



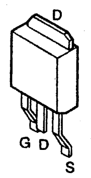
2SJ187



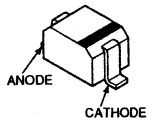
2SK1916-53-F50



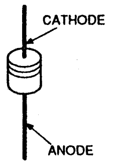
2SK2084STL



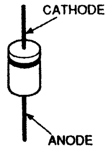
DTZ4.7C
MA111
RD12SB2
UDZ-TE-17-12B
UDZ-TE-17-4.7B
1SS355


ANODE
CATHODE

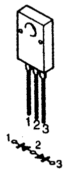
D1N20R
D1N20R-TR
D1NS4
ERA38-06
ERA81-004
ERA82-004
ERA83-006
ERA85-009
HZS9.1NB2
MTZJ-T-77-5.6B
MTZJ-T-77-7.5B
MTZJ-7.5B
RD10ES-B2
RD20JSB3
RD2.2ES-B2
RD24ES-B3
RD30ES-B2
RD33ES-B2
RD36ES-B2
RD5.6ES-B1
RD5.6ES-B2
RD6.2ES-B1
RD6.8ES-B2
RD7.5ES-B2
RD9.1ES-T1B
RD9.1ES-T1B2
RD9.1ES-L
1SS119-25


CATHODE
ANODE

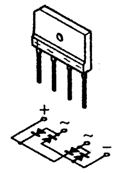
D1NS4-TR
EGP20G
EL1Z
ERB44-06
ESJA89-12
GP08D
GP08DPKG23
P6KE200AG23
RD18F-B2
RD2.2M-T1B
RGP02-17EL-6433
RGP02-17PKG23
RGP02-20EL-6394
RGP10GPKG23
RGP15GPKG23
UDZ-TE-17-2.2B
UF4005PKG23
1SS82T2
1SS83
1SS83TD


CATHODE
ANODE

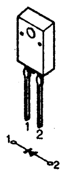
D10SC4MR



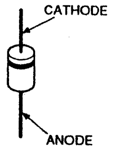
D4SB60L
D6SB60L



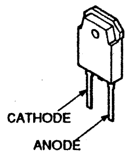
D5L60



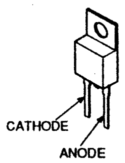
EGP10D
EGP10DPKG23
ERB84-009
ERC06-15S
ERC91-02
ERC91-02L9
ERD31-04
RG1C-V1
RG4C
1SS133T-77


CATHODE
ANODE

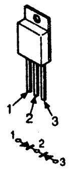
ERD08-15


CATHODE
ANODE

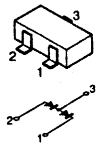
FML-G12S


CATHODE
ANODE

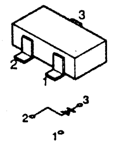
F10P03QL



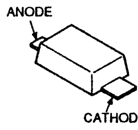
MA157
1SS226



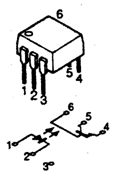
MA3100-TX
02CZ10-TE85L



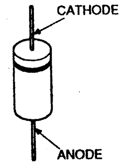
MA77


ANODE
CATHODE

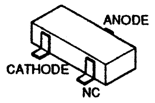
PC111YS


6
5 4
1 2 3
6
5
4
1
2
3

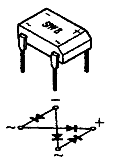
RU3AM


CATHODE
ANODE

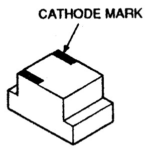
SB01-15CP


ANODE
CATHODE
NC

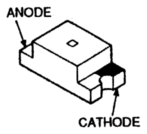
S1WB60B-S-TR



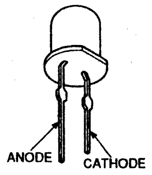
CL-170D
CL-170YG


CATHODE MARK

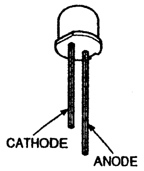
CL-170HR


ANODE
CATHODE

TLG124A


ANODE
CATHODE

TLS263P
TLY263P


CATHODE
ANODE

SECTION 9
EXPLODED VIEWS

with no part number and no
ption are not stocked because they
ldom required for routine service.

- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

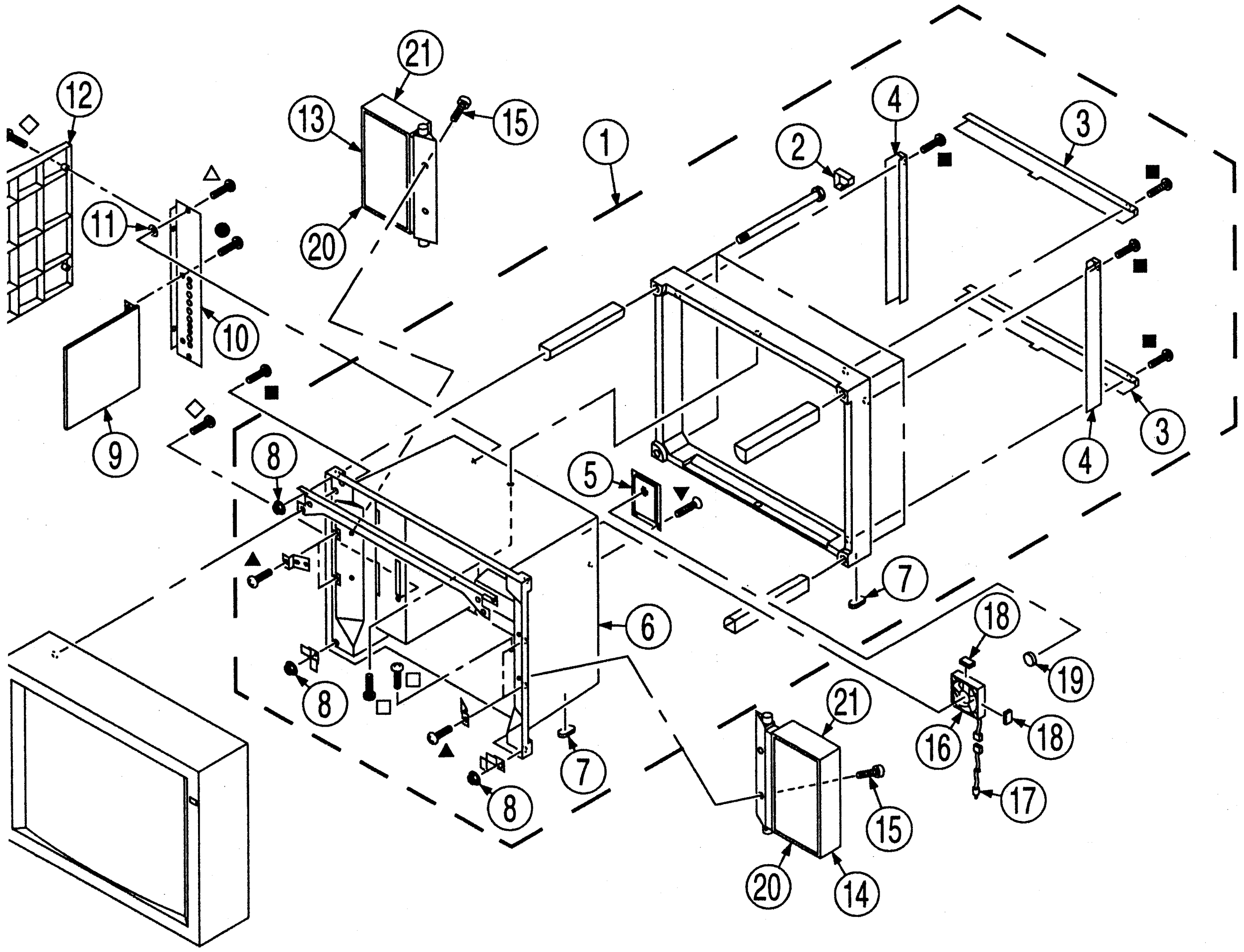
Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

-200R1U/200R1E/200R1A

REAR COVER

● : 7-685-648-79 +BVTP 3X12
▲ : 7-685-647-79 +BVTP 3X10
▼ : 7-682-247-09 +BVTP 4X12
■ : 7-685-663-79 +BVTP 4X16

△ : 7-682-561-09 +B 4X8
□ : 7-685-661-79 +BVTP 4X12
◇ : 7-682-564-09 +B 4X14



O.	PART NO.	DESCRIPTION	REMARK
	X-4034-458-1	COVER ASSY, REAR	2~8
	4-039-913-01	CAP	
	4-039-917-01	BRACKET (H), REAR FRAME	
	4-039-918-01	BRACKET (V), REAR FRAME	
	4-058-182-01	COVER, FAN	
	4-058-190-01	COVER, REAR	
	4-392-860-01	CUSHION (B)	
	4-304-511-00	NUT (M5), FLANGE	
	* A-1373-597-A	U BOARD, COMPLETE	
	* 4-058-185-01	PANEL (A), CONNECTOR	
	3-696-510-01	WASHER (3), STOPPER	

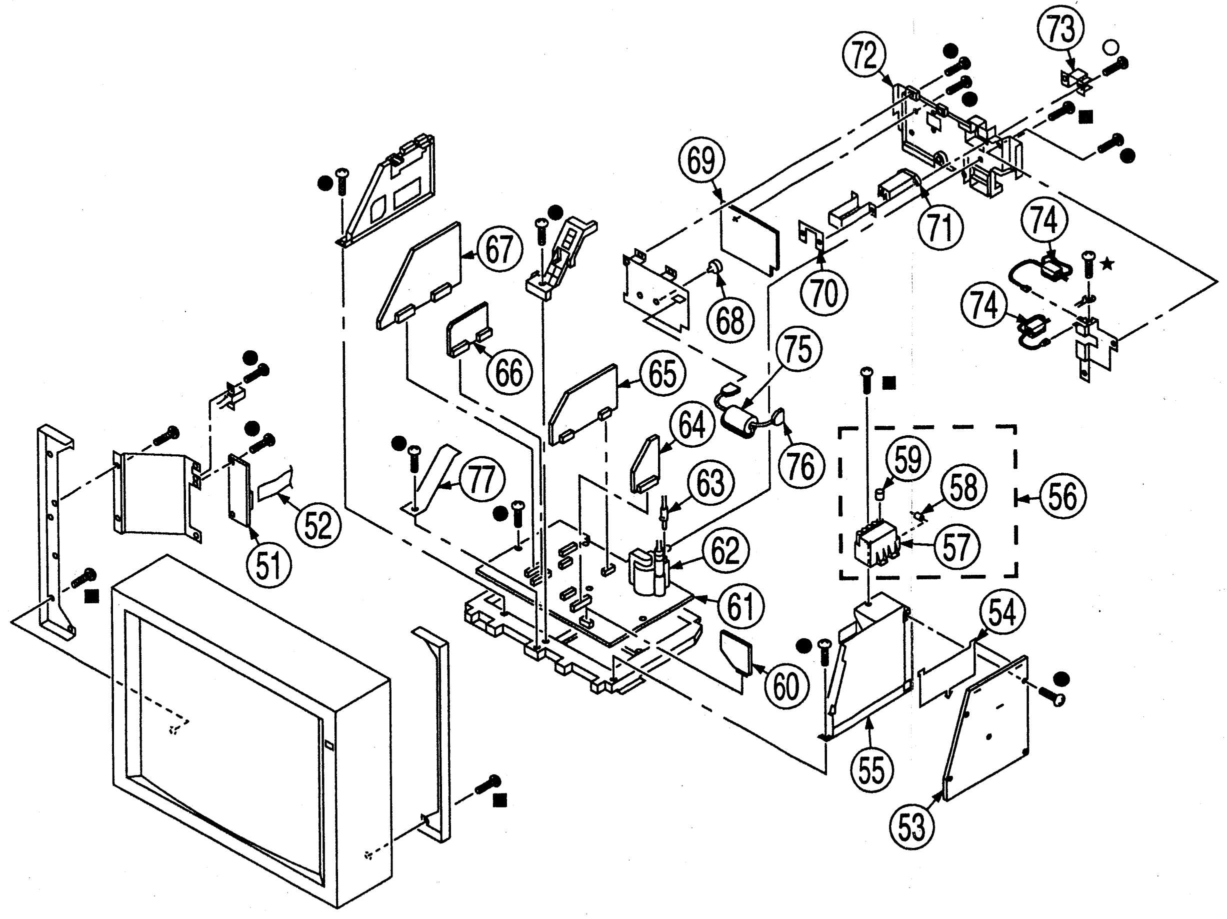
REF. NO.	PART NO.	DESCRIPTION	REMARK
12	* 4-058-188-01	COVER, SIDE	
13	1-505-642-21	SPEAKER (LEFT) (SS-X7A)	
14	1-505-642-22	SPEAKER (RIGHT) (SS-X7A)	
15	X-4374-104-2	ORNAMENTAL SCREW (SS-X7A)	
16	1-541-449-41	FAN, DC (WITH SENSOR) (BKM-202FN)	
17	1-782-404-11	CABLE	
18	4-059-098-01	CUSHION (B)	
19	4-058-695-01	CUSHION (A)	
20	1-505-603-11	SPEAKER, WOFER (SS-X7A)	
21	1-505-604-11	SPEAKER, TWEETER (SS-X7A)	

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

9-2. CHASSIS

● : 7-685-648-79 +BVTP 3X12
■ : 7-685-663-79 +BVTP 4X16
★ : 7-682-661-01 +PS 4X8
○ : 7-682-550-09 +P 3X12

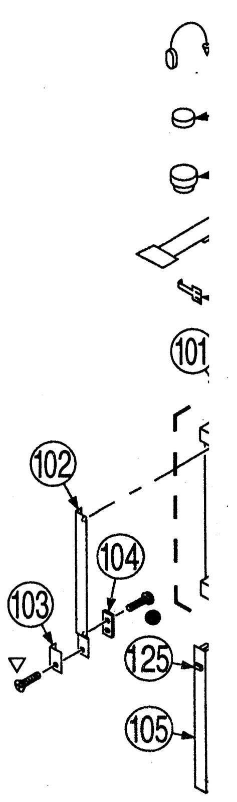


REF. NO.	PART NO.	DESCRIPTION	REMARK
51	* A-1372-298-A	H4 BOARD, COMPLETE	
52	1-782-123-11	CABLE, FLEXIBLE FLAT	
53	* A-1316-298-A	G BOARD, COMPLETE	
54	* 4-058-629-01	INSULATOR (G)	
55	* 4-058-186-01	BRACKET, G PC BOARD	
56	A-1465-245-A	HVR BLOCK ASSY	57~59
57	⚠ 1-453-108-11	DC BLOCK, HIGH-VOLTAGE (HB-1000)	
58	1-202-818-00	RES, SOLID 1.0K	
59	4-373-137-01	CAP (Z), RUBBER	
60	* A-1372-297-A	H3 BOARD, COMPLETE	
61	* A-1297-990-A	A BOARD, COMPLETE	
62	⚠ X-4034-412-1	TRANSFORMER ASSY, FLYBACK NX-3041	
63	1-900-140-13	LEAD ASSY, FOCUS	
64	* A-1293-508-A	A1 BOARD, COMPLETE (200R1U/200R1E)	
64	* A-1293-693-A	A1 BOARD, COMPLETE (200R1A)	

REF. NO.	PART NO.	DESCRIPTION	REMARK
65	* A-1346-563-A	D BOARD, COMPLETE	
66	* A-1346-564-A	DA BOARD, COMPLETE	
67	* A-1394-831-A	UT BOARD, COMPLETE	
68	3-682-057-01	SPACER (SMALL)	
69	* A-1373-599-A	UA BOARD, COMPLETE	
70	3-625-620-00	BRACKET, AC CONNECTOR	
71	⚠ 1-526-813-12	INLET, AC (3P)	
72	4-058-187-01	PANEL, CONNECTOR	
73	2-990-241-02	HOLDER (A), PLUG	
74	1-543-653-11	CORE ASSY, BEAD (DIVISION TYPE)	
75	1-500-278-11	FILTER, CLAMP (FERRITE CORE)	
76	1-900-240-46	CONNECTOR ASSY, FASTON (250)	
77	4-059-741-01	INSULATOR, ANODE CAP (200R1A ONLY)	

9-3. PICTURE TUBE

● : 7-685-648-79
◆ : 7-685-452-19
▽ : 7-621-555-30



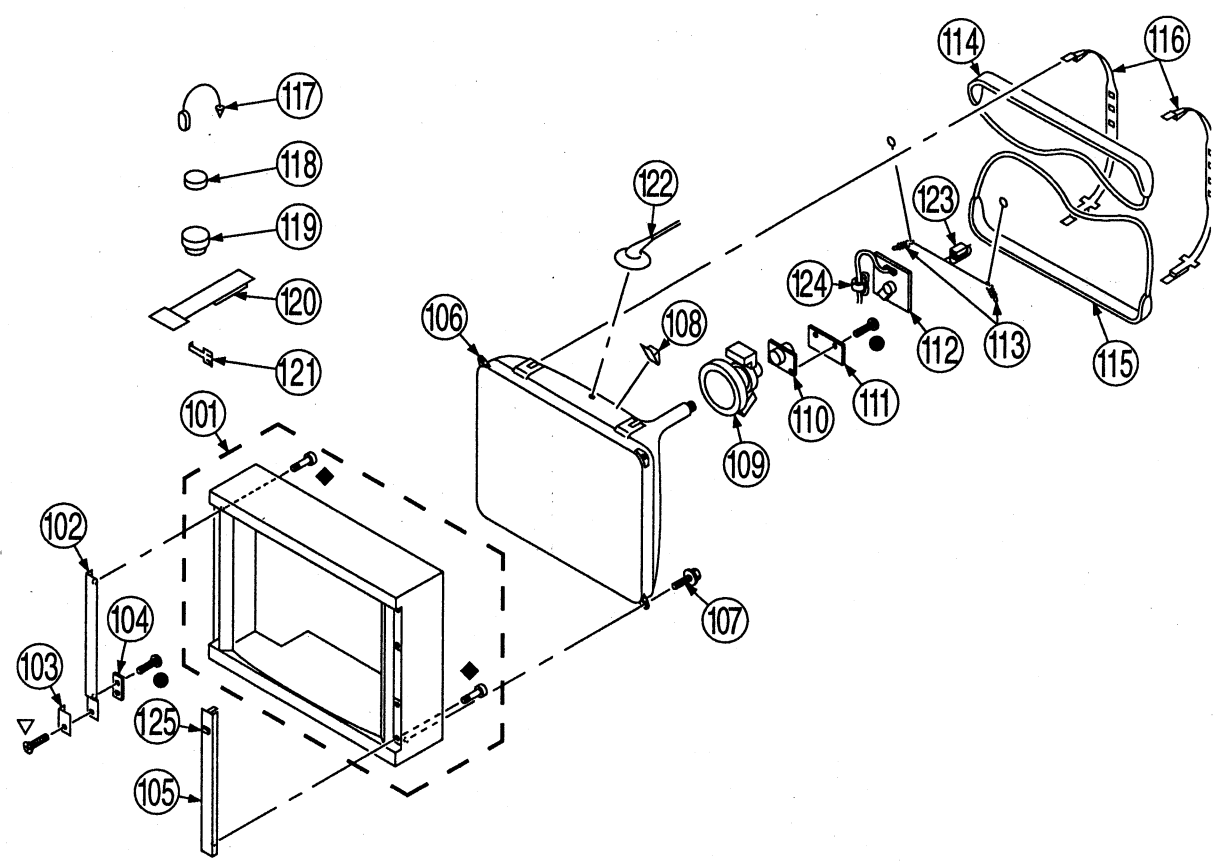
REF. NO.	PART NO.	DESC
101	X-4032-024-4	BEZN
102	X-4034-459-1	PANE
103	4-058-183-01	COVE
104	* A-1372-299-A	H5 B
105	1-473-268-11	KEY
106	⚠ 8-733-845-05	PICT
107	4-046-765-01	SCRE
108	4-046-600-01	SPAC
109	⚠ 8-451-455-11	DEFL
110	⚠ 1-452-616-13	NECK
111	* A-1342-315-A	V BO
112	* A-1331-624-A	C BO
113	4-369-318-00	SPRIN
114	⚠ 1-411-381-11	COIL

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

9-3. PICTURE TUBE

● : 7-685-648-79 +BVTP 3X12
◆ : 7-685-452-19 +BV 3X25
▽ : 7-621-555-30 +K 2X5

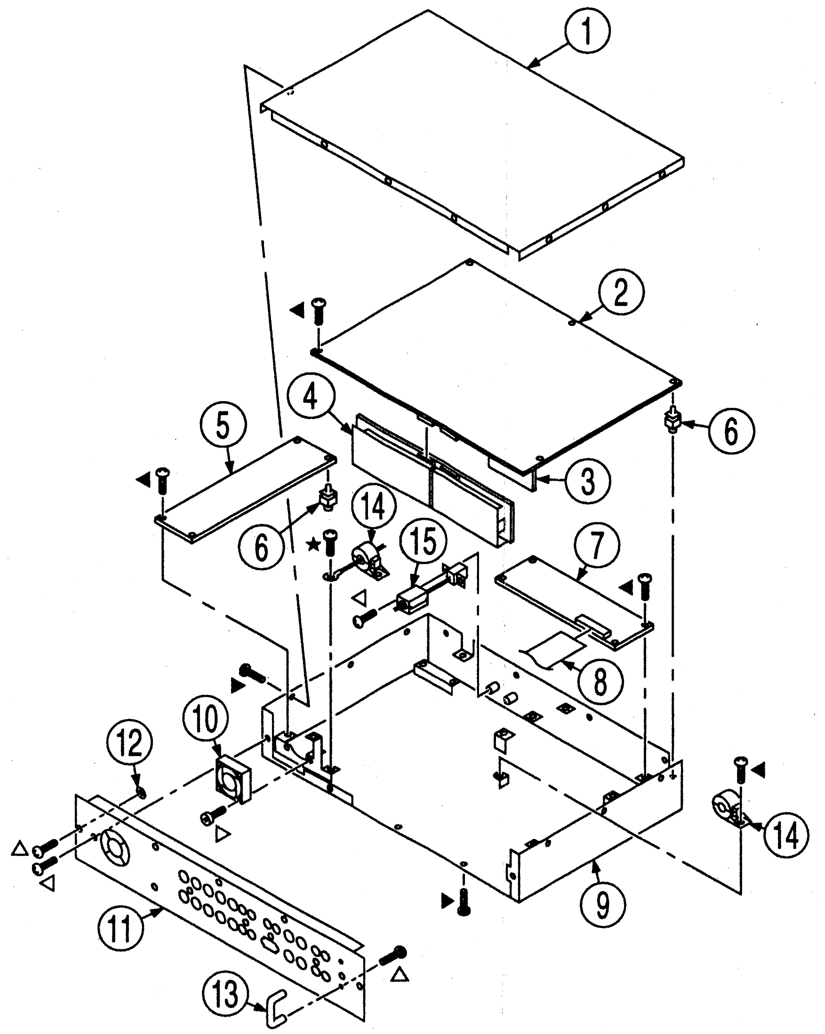


REF. NO.	PART NO.	DESCRIPTION	REMARK
101	X-4032-024-4	BEZNET ASSY	
102	X-4034-459-1	PANEL ASSY, BLIND	
103	4-058-183-01	COVER, TERMINAL	
104	* A-1372-299-A	H5 BOARD, COMPLETE	
105	1-473-268-11	KEY BOARD UNIT (H2 BOARD)	
106	⚠ 8-733-845-05	PICTURE TUBE 29EXS (SD-248/PCE) (M68KUZ10X)	
107	4-046-765-01	SCREW, TAPPING	
108	4-046-600-01	SPACER, DY	
109	⚠ 8-451-455-11	DEFLECTION YOKE Y29EXCM	
110	⚠ 1-452-616-13	NECK ASSY, PICTURE TUBE (NA323)	
111	* A-1342-315-A	V BOARD, COMPLETE	
112	* A-1331-624-A	C BOARD, COMPLETE	
113	4-369-318-00	SPRING, TENSION	
114	⚠ 1-411-381-11	COIL, DEMAGNETIZATION	
115	⚠ 1-411-382-11	COIL, DEMAGNETIZATION	
116	4-037-983-01	HOLDER, DGC	
117	4-308-870-00	CLIP, LEAD WIRE	
118	1-452-032-00	MAGNET,DISK ; 10mmø	
119	1-452-094-00	MAGNET, ROTATABLE DISK ; 15mmø	
120	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	
121	4-034-272-01	PLATE, CORRECTION, TLV	
121	4-034-272-11	PLATE, CORRECTION, TLV	
122	⚠ 1-526-981-81	CAP ASSY, HIGH-VOLTAGE (200R1U/200R1E)	
122	⚠ 1-251-629-11	CAP ASSY, HIGH-VOLTAGE (200R1A)	
123	1-543-653-11	CORE ASSY, BEAD(DIVISION TYPE)	
124	1-543-982-11	CORE, FERRITE	
125	9-908-869-01	KEY TOP (FOR POWER SUPPLY SWITCH)	

BKM-201SC

9-4. CHASSIS

► : 7-682-147-15 +P 3X6
◄ : 7-685-646-79 +BVTP 3X8
★ : 7-682-661-01 +PS 4X8
△ : 7-682-561-09 +B 4X8
▷ : 7-682-652-09 +PS 3X16
◁ : 7-682-548-09 +B 3X8



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	* X-4034-462-1	CASE (LID) ASSY	
2	* A-1135-889-A	B BOARD, COMPLETE	3
3	* A-1131-253-A	B1 BOARD, COMPLETE	
4	* A-1373-596-A	UJ BOARD, COMPLETE	
5	* A-1311-540-A	G2 BOARD, COMPLETE	
6	* 4-353-620-11	HINGE, PC BOARD	
7	* A-1372-296-A	H1 BOARD, COMPLETE	
8	1-782-122-11	CABLE, FLEXIBLE FLAT	
9	* X-4034-461-1	CASE (MAIN) ASSY	
10	1-698-756-11	MOTOR, DC FAN	
11	* 4-058-185-11	PANEL, CONNECTOR (A)	
12	3-696-510-01	WASHER (3), STOPPER	
13	4-052-200-01	HANDLE, PROTECTOR	
14	1-500-263-11	CORE, TROIDAL	
15	1-543-827-11	CLAMP, SLEEVE FERRITE	

SECTION 10
ELECTRICAL PARTS LIST

A1 **A**

NOTE:

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- The components identified by ⊠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

RESISTORS
- All resistors are in ohms
- F : nonflammable
- CAPACITORS
  PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

PGM-200R1U/200R1E/200R1A

REF. NO.	PART NO.	DESCRIPTION				REMARK
	*A-1293-508-A	A1 BOARD, COMPLETE (PGM-200R1U/R1E) **********************				
	*A-1293-693-A	A1 BOARD, COMPLETE (PGM-200R1A) **********************				
		<CAPACITOR>				
C1825	1-104-999-11	MYLAR	0.1MF	10%	200V	
		<CONNECTOR>				
CN1801	1-573-300-11	CONNECTOR, BOARD TO BOARD 18P				
CN1804	* 1-508-768-00	PIN, CONNECTOR (5mm PITCH) 6P				
		<DIODE>				
D1810	8-719-908-03	DIODE GP08D				
D1811	8-719-908-03	DIODE GP08D				
		<COIL>				
L1801	1-459-075-00	COIL,DYNAMIC CONVERSION CHOKE				
		<RESISTOR>				
R525	1-216-478-11	METAL OXIDE	390	5%	3W	F
R526	1-216-478-11	METAL OXIDE	390	5%	3W	F
R666	1-216-485-11	METAL OXIDE	5.6K	5%	3W	F
R667	1-216-485-11	METAL OXIDE	5.6K	5%	3W	F
R1833	1-249-389-11	CARBON	4.7	5%	1/4W	F
R1834	1-216-400-11	METAL OXIDE	8.2	5%	3W	F (200R1U/200R1E)
R1835	1-216-423-11	METAL OXIDE	27	5%	1W	F (200R1A)
R1835	1-216-474-11	METAL OXIDE	82	5%	3W	F (200R1U/200R1E)
R1837	1-216-469-11	METAL OXIDE	12	5%	3W	F
R1862	1-216-381-11	METAL OXIDE	0.22	5%	3W	F (200R1A)
R1862	1-216-399-00	METAL OXIDE	6.8	5%	3W	F (200R1U/200R1E)
R1863	1-215-910-00	METAL OXIDE	68	5%	3W	F (200R1U/200R1E)
R1863	1-216-423-11	METAL OXIDE	27	5%	1W	F (200R1A)
R1864	1-216-473-11	METAL OXIDE	56	5%	3W	F (200R1U/200R1E)
R1864	1-216-474-11	METAL OXIDE	82	5%	3W	F (200R1A)
R1865	1-215-905-11	METAL OXIDE	10	5%	3W	F (200R1U/200R1E)
R1865	1-216-423-11	METAL OXIDE	27	5%	1W	F (200R1A)

****

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1297-990-A	A BOARD, COMPLETE **********************			
	1-202-826-00	SOLID	4.7K	10%	1/2W
	1-202-826-00	SOLID	4.7K	20%	1/2W
	1-202-826-00	SOLID	4.7K	20%	1/2W
	8-719-020-60	DIODE ESJA89-12T3.5			
		<CAPACITOR>			
C501	1-126-935-11	ELECT	470MF	20%	6.3V
C502	1-126-935-11	ELECT	470MF	20%	6.3V
C503	1-104-492-11	FILM	0.0056MF	3%	2KV
C504	1-104-492-11	FILM	0.0056MF	3%	2KV
C505	1-104-489-11	FILM	820PF	3%	1.6KV
C517	1-104-999-11	MYLAR	0.1MF	10%	200V
C518	1-107-924-11	ELECT	0.47MF	20%	100V
C519	1-102-110-00	CERAMIC	220PF	10%	50V
C520	1-102-002-00	CERAMIC	680PF	10%	500V
C523	1-111-229-11	FILM	0.018MF	3%	2KV
C524	1-162-116-00	CERAMIC	680PF	10%	2KV
C525	⚠1-129-718-51	FILM	0.022MF	10%	630V
C526	1-107-514-11	FILM	1.2MF	5%	400V
C527	1-106-343-00	MYLAR	0.001MF	10%	100V
C528	1-109-960-11	FILM	0.43MF	5%	400V
C529	1-104-709-11	ELECT	4.7MF	0	160V
C530	1-107-514-11	FILM	1.2MF	5%	400V
C531	1-109-837-11	FILM	0.56MF	5%	400V
C532	1-107-961-91	ELECT	10MF	20%	250V
C537	1-106-355-12	MYLAR	0.0033MF	10%	200V
C538	1-137-417-11	FILM	0.015MF	10%	100V
C541	1-126-964-11	ELECT	10MF	20%	50V
C551	1-126-967-11	ELECT	47MF	20%	50V
C552	1-102-114-00	CERAMIC	470PF	10%	50V
C558	1-129-718-00	FILM	0.022MF	5%	630V
C559	1-106-387-00	MYLAR	0.068MF	10%	200V
C560	1-136-557-11	FILM	0.0033MF	10%	630V
C561	1-102-244-00	CERAMIC	220PF	10%	500V
C562	1-136-553-11	FILM	0.0015MF	10%	630V
C563	1-102-228-00	CERAMIC	470PF	10%	500V
C564	1-102-228-00	CERAMIC	470PF	10%	500V
C565	1-128-528-11	ELECT	470MF	20%	25V
C566	1-128-528-11	ELECT	470MF	20%	25V
C568	1-102-244-00	CERAMIC	220PF	10%	500V
C569	1-162-114-00	CERAMIC	0.0047MF		2KV
C570	1-162-116-00	CERAMIC	680PF	10%	2KV
C571	1-162-116-00	CERAMIC	680PF	10%	2KV
C572	1-137-417-11	MYLAR	0.0047MF	10%	200V
C573	1-107-889-11	ELECT	220MF	20%	10V
C575	1-102-038-00	CERAMIC	0.001MF		500V
C576	1-109-954-11	ELECT	0.47MF	20%	160V
C577	1-107-655-11	ELECT	47MF	20%	250V
C579	1-106-367-00	MYLAR	0.01MF	10%	200V
C580	1-106-387-00	MYLAR	0.068MF	10%	200V
C581	1-137-374-11	FILM	0.047MF	5%	50V

A

REF. NO.	PART NO.	DESCRIPTION			REMARK
C582	1-126-941-11	ELECT	470MF	20%	25V
C583	1-102-074-00	CERAMIC	0.001MF	10%	50V
C585	1-126-941-11	ELECT	470MF	20%	25V
C586	1-107-911-11	ELECT	220MF	20%	50V
C592	1-126-967-11	ELECT	47MF	20%	10V
C593	1-104-664-11	ELECT	47MF	20%	25V
C594	1-104-664-11	ELECT	47MF	20%	25V
C595	1-104-664-11	ELECT	47MF	20%	25V
C596	1-126-967-11	ELECT	47MF	20%	16V
C597	1-109-889-11	ELECT	1MF	20%	50V
C598	1-126-923-11	ELECT	220MF	20%	10V
C600	1-126-964-11	ELECT	10MF	20%	50V
C601	1-107-909-11	ELECT	47MF	20%	35V
C602	1-126-964-11	ELECT	10MF	20%	50V
C603	1-126-964-11	ELECT	10MF	20%	50V
C604	1-126-947-11	ELECT	47MF	20%	35V
C605	1-126-947-11	ELECT	47MF	20%	35V
C606	1-126-947-11	ELECT	47MF	20%	35V
C607	1-126-953-11	ELECT	2200MF	20%	35V
C609	1-126-953-11	ELECT	2200MF	20%	35V
C610	1-136-165-00	FILM	0.1MF	5%	50V
C611	1-136-165-00	FILM	0.1MF	5%	50V
C612	1-126-964-11	ELECT	10MF	20%	50V
C613	1-126-953-11	ELECT	2200MF	20%	35V
C615	1-130-471-00	MYLAR	0.001MF	5%	50V
C627	1-136-853-11	FILM	0.56MF	5%	200V
C630	1-107-995-11	ELECT	100MF	0	160V
C631	1-106-395-00	MYLAR	0.15MF	10%	200V
C632	1-137-399-11	FILM	0.1MF	5%	50V
C633	1-130-495-00	MYLAR	0.1MF	5%	50V
C634	1-107-910-11	ELECT	100MF	20%	50V
C640	1-126-964-11	ELECT	10MF	20%	50V
C641	1-126-964-11	ELECT	10MF	20%	50V
C642	1-107-901-11	ELECT	0.47MF	20%	50V
C643	1-102-002-00	CERAMIC	680PF	10%	500V
C644	1-136-165-00	FILM	0.1MF	5%	50V
C650	1-104-999-11	MYLAR	0.1MF	10%	200V
C651	1-162-117-00	CERAMIC	100PF	10%	500V
C652	1-162-117-00	CERAMIC	100PF	10%	500V
C654	1-107-995-11	ELECT	100MF	0	160V
C655	1-107-995-11	ELECT	100MF	0	160V
C656	1-126-934-11	ELECT	220MF	20%	16V
C666	1-107-995-11	ELECT	100MF	0	160V
C667	1-126-967-11	ELECT	47MF	20%	50V
C668	1-126-967-11	ELECT	47MF	20%	50V
C669	1-126-967-11	ELECT	47MF	20%	50V
C670	1-126-967-11	ELECT	47MF	20%	50V
C671	1-126-967-11	ELECT	47MF	20%	50V
C672	1-126-967-11	ELECT	47MF	20%	50V
C673	1-126-967-11	ELECT	47MF	20%	50V
C674	1-126-967-11	ELECT	47MF	20%	50V
C675	1-126-967-11	ELECT	47MF	20%	50V
C676	1-126-967-11	ELECT	47MF	20%	50V
C680	1-136-177-00	FILM	1MF	5%	50V
C681	1-126-960-11	ELECT	1MF	20%	50V
C682	1-126-967-11	ELECT	47MF	20%	50V
C683	1-136-177-00	FILM	1MF	5%	50V
C684	1-126-960-11	ELECT	1MF	20%	50V
C685	1-126-934-11	ELECT	220MF	20%	16V
C686	1-130-483-00	MYLAR	0.01MF	5%	50V
C690	1-136-165-00	FILM	0.1MF	5%	50V
C699	1-136-177-00	FILM	1MF	5%	50V
C1803	1-126-967-11	ELECT	47MF	20%	50V
C1804	1-104-664-11	ELECT	47MF	20%	25V
C1805	1-136-894-11	FILM	0.01MF	5%	50V
C1808	1-130-469-00	MYLAR	680PF	5%	50V
C1809	1-130-467-00	MYLAR	470PF	5%	50V
C1810	1-136-171-00	FILM	0.33MF	5%	50V
C1811	1-136-171-00	FILM	0.33MF	5%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1812	1-136-177-00	FILM	1MF	5%	50V
C1813	1-136-104-00	FILM	0.16MF	5%	200V
C1817	1-126-968-11	ELECT	100MF	20%	50V
C1820	1-126-934-11	ELECT	220MF	20%	16V
C1828	1-136-177-00	FILM	1MF	5%	50V
C1835	1-136-165-00	FILM	0.1MF	5%	50V
C1853	1-106-375-12	MYLAR	0.022MF	10%	100V
		<CONNECTOR>			
CN501	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P			
CN502	*1-564-510-11	PLUG, CONNECTOR 7P			
CN503	*1-564-508-11	PLUG, CONNECTOR 5P			
CN504	1-573-296-11	CONNECTOR, BOARD TO BOARD 10P			
CN506	1-573-297-11	CONNECTOR, BOARD TO BOARD 18P			
CN507	*1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P			
CN508	1-573-296-11	CONNECTOR, BOARD TO BOARD 10P			
CN509	1-573-296-11	CONNECTOR, BOARD TO BOARD 10P			
CN510	1-779-209-11	SOCKET, CONNECTOR 32P			
CN511	1-779-209-11	SOCKET, CONNECTOR 32P			
CN512	*1-564-508-11	PLUG, CONNECTOR 5P			
CN513	*1-564-507-11	PLUG, CONNECTOR 4P			
CN514	1-573-297-11	CONNECTOR, BOARD TO BOARD 18P			
CN515	*1-564-509-11	PLUG, CONNECTOR 6P			
CN516	*1-564-507-11	PLUG, CONNECTOR 4P			
CN518	1-573-296-11	CONNECTOR, BOARD TO BOARD 10P			
		<DIODE>			
D501	8-719-300-33	DIODE RU-3AM			
D502	8-719-911-19	DIODE 1SS119-25			
D503	8-719-979-99	DIODE ERD08M-15			
	4-382-854-11	SCREW (M3X10), P, SW (+) ; D503			
D505	8-719-979-85	DIODE EGP20G			
D509	8-719-970-87	DIODE ERA38-06			
D510	8-719-302-43	DIODE EL1Z			
D511	8-719-300-33	DIODE RU-3AM			
D512	8-719-931-04	DIODE ERD31-04			
D513	8-719-931-04	DIODE ERD31-04			
D516	8-719-018-82	DIODE RGP02-20EL-6394			
D520	8-719-908-03	DIODE GP08D			
D521	8-719-150-92	DIODE RD33EB3T			
D522	8-719-911-19	DIODE 1SS119-25			
D523	8-719-911-19	DIODE 1SS119-25			
D524	8-719-028-72	DIODE RGP02-17EL-6433			
D525	8-719-109-88	DIODE RD5.6ESB1			
D530	8-719-510-48	DIODE D1N20R			
D531	8-719-510-48	DIODE D1N20R			
D532	8-719-110-83	DIODE RD36ESB2			
D545	8-719-911-19	DIODE 1SS119-25			
D546	8-719-945-80	DIODE ERC06-15S			
D547	8-719-911-19	DIODE 1SS119-25			
D548	8-719-911-19	DIODE 1SS119-25			
D550	8-719-109-88	DIODE RD5.6ESB1			
D560	8-719-110-63	DIODE RD24ESB3			
D561	8-719-110-03	DIODE RD7.5ESB2			
D562	8-719-911-19	DIODE 1SS119-25			
D563	8-719-911-19	DIODE 1SS119-25			
D564	4-382-854-01	SCREW (M3X8), P, SW (+)			
D564	8-719-045-48	DIODE FML-G12S			
D590	8-719-901-83	DIODE 1SS83			
D1806	8-719-911-19	DIODE 1SS119-25			
D1817	8-719-987-86	DIODE ERB84-009TP1			
D1818	8-719-987-86	DIODE ERB84-009TP1			
D1822	8-719-109-92	DIODE RD6.2ESB1			
D1823	8-719-109-88	DIODE RD5.6ESB1			
D1824	8-719-987-87	DIODE ERA85-009			

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

A

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<CONNECTOR>	
DY1	* 1-580-798-11	CONNECTOR PIN (DY) 6P	
		<FERRITE BEAD>	
FB501	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB502	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
		<IC>	
IC504	8-759-192-71	IC STV9379	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; IC504	
IC505	8-759-168-24	IC TA8200AH	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; IC505	
IC506	8-759-231-58	IC TA7812S	
	4-382-854-01	SCREW (M3X8), P, SW (+) ; IC506	
IC507	8-759-231-58	IC TA7812S	
	4-382-854-01	SCREW (M3X8), P, SW (+) ; IC507	
IC508	8-759-231-58	IC TA7812S	
	4-382-854-01	SCREW (M3X8), P, SW (+) ; IC508	
IC510	8-759-701-75	IC NJM7805FA	
	4-382-854-01	SCREW (M3X8), P, SW (+) ; IC510	
IC511	8-759-701-59	IC NJM78M09FA	
	4-382-854-01	SCREW (M3X8), P, SW (+) ; IC511	
IC513	8-759-701-65	IC NJM79M05FA	
IC514	8-759-701-88	IC NJM7912FA	
	4-382-854-01	SCREW (M3X8), P, SW (+) ; IC514	
IC515	8-759-701-75	IC NJM7805FA	
IC517	8-759-231-58	IC TA7812S	
	4-382-854-01	SCREW (M3X8), P, SW (+) ; IC517	
IC550	8-759-135-80	IC uPC358C	
IC551	8-759-729-03	IC NJM2903D	
IC560	⚠1-810-321-13	IC PROTECTOR MODULE, HV(HVPM-3A)	
IC561	8-759-231-58	IC TA7812S	
IC1802	8-759-135-80	IC uPC358C	
IC1803	8-759-902-21	IC SN74LS221N	
IC1804	8-759-701-88	IC NJM7912FA	
	4-382-854-01	SCREW (M3X8), P, SW (+) ; IC1804	
		<COIL>	
L501	1-411-469-11	COIL, CHOKE 15UH	
L502	1-406-671-11	COIL, CHOKE 1.0mH	
L503	1-409-945-11	COIL, CHOKE (PMC) 120UH	
L504	1-459-123-00	COIL,DUST CORE(PAC)	
L506	1-459-105-21	COIL(WITH CORE)	
L508	1-412-519-11	INDUCTOR 3.3UH	
L509	1-412-519-11	INDUCTOR 3.3UH	
L510	1-412-523-41	INDUCTOR 6.8UH	
L512	1-412-552-11	INDUCTOR 2.2mH	
L514	1-412-531-31	INDUCTOR 33UH	
L515	1-412-531-31	INDUCTOR 33UH	
L520	1-412-531-31	INDUCTOR 33UH	
L1802	1-406-977-21	COIL, CHOKE 100UH	
		<IC LINK>	
PS1801	⚠1-532-679-91	LINK, IC (0.6A/150V)	
PS1802	⚠1-532-637-91	LINK, IC (1A/150V)	
		<TRANSISTOR>	
Q504	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q505	8-729-821-07	TRANSISTOR 2SC3997CA	
	* 4-042-911-21	INSULATOR ; Q505	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; Q505	
Q506	8-729-019-71	TRANSISTOR 2SK1916-53-F50	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; Q506	
Q508	8-729-140-96	TRANSISTOR 2SD774-34	
Q509	8-729-140-93	TRANSISTOR 2SB733-34	
Q510	8-729-821-07	TRANSISTOR 2SC3997CA	
	* 4-042-911-21	INSULATOR ; Q510	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; Q510	
Q511	8-729-140-96	TRANSISTOR 2SD774-34	
Q512	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q513	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q514	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q516	8-729-303-47	TRANSISTOR 2SK552	
Q517	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q518	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q519	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q520	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q521	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q522	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q523	8-729-303-47	TRANSISTOR 2SK552	
Q531	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q532	8-729-033-93	TRANSISTOR FS10SM-18A-A8	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; Q532	
	4-389-026-11	SHEET, BN ; Q532	
Q560	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1802	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1803	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1804	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1805	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1806	8-729-024-95	TRANSISTOR 2SB1565EF	
Q1807	8-729-024-95	TRANSISTOR 2SB1565EF	
	4-382-854-01	SCREW (M3X8), P, SW (+) ; Q1807	
Q1808	8-729-019-01	TRANSISTOR 2SD2394-EF	
	4-382-854-01	SCREW (M3X8), P, SW (+) ; Q1808	
Q1809	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1810	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1811	8-729-019-01	TRANSISTOR 2SD2394-EF	
		<RESISTOR>	
R501	1-215-880-00	METAL OXIDE 10 5% 2W	F
R502	1-249-429-11	CARBON 10K 5% 1/4W	
R503	1-249-439-11	CARBON 68K 5% 1/4W	
R504	1-249-441-11	CARBON 100K 5% 1/4W	
R505	1-249-429-11	CARBON 10K 5% 1/4W	
R506	1-249-413-11	CARBON 470 5% 1/4W	
R507	1-249-417-11	CARBON 1K 5% 1/4W	
R508	1-249-417-11	CARBON 1K 5% 1/4W	
R522	1-249-411-11	CARBON 330 5% 1/4W	
R523	1-247-843-11	CARBON 3.3K 5% 1/4W	
R524	1-215-872-11	METAL OXIDE 3.3K 5% 1W	F
R527	1-215-880-00	METAL OXIDE 10 5% 2W	F
R528	1-249-397-11	CARBON 22 5% 1/4W	F
R529	1-249-393-11	CARBON 10 5% 1/4W	F
R530	1-249-393-11	CARBON 10 5% 1/4W	F
R531	1-249-425-11	CARBON 4.7K 5% 1/4W	
R532	1-249-441-11	CARBON 100K 5% 1/4W	
R533	1-215-899-11	METAL OXIDE 15K 5% 2W	F
R534	1-202-830-00	SOLID 10K 20% 1/2W	
R535	1-202-830-00	SOLID 10K 20% 1/2W	
R550	1-215-901-00	METAL OXIDE 33K 5% 2W	F
R551	1-216-464-11	METAL OXIDE 18K 5% 2W	F
R552	1-215-467-00	METAL 82K 1% 1/4W	
R553	1-215-444-00	METAL 9.1K 1% 1/4W	
R554	1-215-457-00	METAL 33K 1% 1/4W	
R555	1-215-457-00	METAL 33K 1% 1/4W	
R556	1-215-453-00	METAL 22K 1% 1/4W	
R558	1-249-401-11	CARBON 47 5% 1/4W	
R559	1-249-401-11	CARBON 47 5% 1/4W	
R560	1-249-429-11	CARBON 10K 5% 1/4W	
R561	1-247-863-91	CARBON 22K 5% 1/4W	
R562	1-247-863-91	CARBON 22K 5% 1/4W	
R563	1-215-442-00	METAL 7.5K 1% 1/4W	
R564	1-215-453-00	METAL 22K 1% 1/4W	
R569	1-249-441-11	CARBON 100K 5% 1/4W	

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

A G

REF. NO.	PART NO.	DESCRIPTION			REMARK	
R570	1-249-441-11	CARBON	100K	5%	1/4W	
R571	1-249-441-11	CARBON	100K	5%	1/4W	
R572	1-216-439-00	METAL OXIDE	12K	5%	1W	F
R573	1-216-459-00	METAL OXIDE	2.7K	5%	2W	F
R574	1-216-459-00	METAL OXIDE	2.7K	5%	2W	F
R577	1-260-288-11	CARBON	0.47	5%	1/2W	
R578	1-260-288-11	CARBON	0.47	5%	1/2W	
R584	1-249-425-11	CARBON	4.7K	5%	1/4W	
R585	1-249-425-11	CARBON	4.7K	5%	1/4W	
R586	1-247-903-00	CARBON	1M	5%	1/4W	
R587	1-249-440-11	CARBON	82K	5%	1/4W	
R588	1-215-869-11	METAL OXIDE	1K	5%	1W	F
R589	1-249-441-11	CARBON	100K	5%	1/4W	
R590	1-247-901-11	CARBON	820K	5%	1/4W	
R591	1-215-881-11	METAL OXIDE	15	5%	2W	F
R592	1-260-320-11	CARBON	220	5%	1/2W	
R598	1-215-882-00	METAL OXIDE	22	5%	2W	F
R599	1-249-437-11	CARBON	47K	5%	1/4W	
R600	1-249-429-11	CARBON	10K	5%	1/4W	
R601	1-249-437-11	CARBON	47K	5%	1/4W	
R602	1-215-453-00	METAL	22K	1%	1/4W	
R604	1-215-455-00	METAL	27K	1%	1/4W	
R605	1-216-370-11	METAL OXIDE	1.2	5%	2W	F
R606	1-215-888-00	METAL OXIDE	220	5%	2W	F
R609	1-249-428-11	CARBON	8.2K	5%	1/4W	
R610	1-249-432-11	CARBON	18K	5%	1/4W	
R611	1-249-432-11	CARBON	18K	5%	1/4W	
R613	1-249-437-11	CARBON	47K	5%	1/4W	
R614	1-249-421-11	CARBON	2.2K	5%	1/4W	
R615	1-247-815-91	CARBON	220	5%	1/4W	
R620	1-249-424-11	CARBON	3.9K	5%	1/4W	
R621	1-249-424-11	CARBON	3.9K	5%	1/4W	
R622	1-249-402-11	CARBON	56	5%	1/4W	
R623	1-249-424-11	CARBON	3.9K	5%	1/4W	
R624	1-249-424-11	CARBON	3.9K	5%	1/4W	
R625	1-249-402-11	CARBON	56	5%	1/4W	
R626	1-247-863-91	CARBON	22K	5%	1/4W	
R627	1-247-863-91	CARBON	22K	5%	1/4W	
R628	1-249-441-11	CARBON	100K	5%	1/4W	
R629	1-249-441-11	CARBON	100K	5%	1/4W	
R630	1-249-398-11	CARBON	27	5%	1/4W	F
R631	1-249-441-11	CARBON	100K	5%	1/4W	
R632	1-249-385-11	CARBON	2.2	5%	1/4W	F
R633	1-249-385-11	CARBON	2.2	5%	1/4W	F
R635	1-249-435-11	CARBON	33K	5%	1/4W	
R636	1-249-431-11	CARBON	15K	5%	1/4W	
R638	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R654	1-216-386-11	METAL OXIDE	0.56	5%	3W	F
R655	1-216-386-11	METAL OXIDE	0.56	5%	3W	F
R656	1-249-401-11	CARBON	47	5%	1/4W	
R657	1-249-425-11	CARBON	4.7K	5%	1/4W	
R658	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R659	1-247-807-31	CARBON	100	5%	1/4W	
R664	1-260-288-11	CARBON	0.47	5%	1/2W	
R665	1-215-865-11	METAL OXIDE	220	5%	1W	F
R669	1-249-417-11	CARBON	1K	5%	1/4W	
R670	1-216-394-00	METAL OXIDE	2.7	5%	3W	F
R671	1-216-394-00	METAL OXIDE	2.7	5%	3W	F
R672	1-249-413-11	CARBON	470	5%	1/4W	F
R674	1-249-429-11	CARBON	10K	5%	1/4W	
R675	1-249-425-11	CARBON	4.7K	5%	1/4W	
R683	1-216-464-11	METAL OXIDE	18K	5%	2W	F
R684	1-215-442-00	METAL	7.5K	1%	1/4W	
R685	1-215-453-00	METAL	22K	1%	1/4W	
R1802	1-247-887-00	CARBON	220K	5%	1/4W	
R1803	1-215-465-00	METAL	68K	1%	1/4W	
R1806	1-216-397-11	METAL OXIDE	4.7	5%	3W	F
R1808	1-247-887-00	CARBON	220K	5%	1/4W	
R1811	1-249-429-11	CARBON	10K	5%	1/4W	

REF. NO.	PART NO.	DESCRIPTION			REMARK	
R1812	1-215-419-00	METAL	820	1%	1/4W	
R1813	1-215-466-00	METAL	75K	1%	1/4W	
R1814	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1815	1-217-469-00	FUSIBLE	1	5%	1W	F
R1819	1-215-914-11	METAL OXIDE	330	5%	3W	F
R1822	1-249-409-11	CARBON	220	5%	1/4W	F
R1823	1-249-401-11	CARBON	47	5%	1/4W	F
R1825	1-215-455-00	METAL	27K	1%	1/4W	
R1828	1-215-866-11	METAL OXIDE	330	5%	1W	F
R1830	1-217-469-00	FUSIBLE	1	5%	1W	F
R1831	1-216-429-00	METAL OXIDE	270	5%	1W	F
R1832	1-215-885-00	METAL OXIDE	68	5%	2W	F
R1846	1-249-429-11	CARBON	10K	5%	1/4W	

<VARIABLE RESISTOR>

RV1801	1-241-766-11	RES, ADJ, CERMET 47K

<SPARK GAP>

SG501	1-519-422-11	GAP, SPARK

<TRANSFORMER>

T501	⚠1-437-209-11	TRANSFORMER, HORIZONTAL DRIVE
T502	⚠1-427-663-11	HLT
T503	1-427-628-11	TRANSFORMER, DYNAMIC FOCUS
T504	⚠X-4034-412-1	TRANSFORMER ASSY, FLYBACK (NX-3041)
T505	1-431-177-11	TRANSFORMER, FERRITE (HOT)
T506	1-437-211-11	TRANSFORMER, HORIZONTAL DRIVE
T507	1-411-214-11	COIL, CHOKE 510UH
T1801	1-427-626-11	TRANSFORMER, FERRITE (VPOT)

****

* A-1316-298-A G BOARD, COMPLETE
****

4-382-854-01	SCREW (M3X8), P, SW (+)
4-382-854-11	SCREW (M3X10), P, SW (+)
7-682-548-04	SCREW +P 3X8
7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3

<CAPACITOR>

C601	⚠1-113-924-91	CERAMIC	0.0047MF	20%	250V
C602	⚠1-104-705-51	FILM	0.1MF	20%	250V
C603	⚠1-104-708-51	FILM	0.47MF	20%	250V
C604	⚠1-113-924-91	CERAMIC	0.0047MF	20%	250V
C605	⚠1-113-924-91	CERAMIC	0.0047MF	20%	250V
C607	1-137-485-11	FILM	0.68MF	10%	630V
C608	1-137-485-11	FILM	0.68MF	10%	630V
C609	1-136-206-11	FILM	0.033MF	10%	630V
C610	1-136-538-11	FILM	0.001MF	3%	2KV
C611	1-106-353-00	MYLAR	0.0027MF	10%	100V
C612	1-126-963-11	ELECT	4.7MF	20%	50V
C613	1-126-949-11	ELECT	220MF	20%	35V
C614	1-126-966-11	ELECT	33MF	20%	50V
C615	⚠1-113-924-91	CERAMIC	0.0047MF	20%	250V
C616	⚠1-113-924-91	CERAMIC	0.0047MF	20%	250V
C618	1-162-115-00	CERAMIC	330PF	10%	2KV
C619	1-113-927-11	CERAMIC	0.01MF		250V
C620	1-161-754-00	CERAMIC	0.001MF	10%	2KV
C621	1-111-741-11	ELECT	1500MF	0	160V
C622	1-126-923-11	ELECT	220MF	20%	10V
C623	1-130-783-00	MYLAR	0.33MF	10%	100V
C624	1-107-637-11	ELECT	22MF	20%	160V

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

G

REF. NO.	PART NO.	DESCRIPTION			REMARK
C625	1-162-318-11	CERAMIC	0.001MF	10%	500V
C626	1-111-070-51	ELECT	0.0022F	20%	25V
C627	1-162-318-11	CERAMIC	0.001MF	10%	500V
C628	1-111-070-51	ELECT	0.0022F	20%	25V
C629	1-162-318-11	CERAMIC	0.001MF	10%	500V
C630	1-111-097-11	ELECT	0.0022F	20%	35V
C635	1-113-920-11	CERAMIC	0.0022MF	20%	250V
C640	1-104-666-11	ELECT	220MF	20%	25V
C641	1-126-964-11	ELECT	10MF	20%	50V
C642	1-126-967-11	ELECT	47MF	20%	50V
C643	1-126-964-11	ELECT	10MF	20%	50V
C644	1-126-964-11	ELECT	10MF	20%	50V
C645	1-126-933-11	ELECT	100MF	20%	10V
C646	1-126-940-11	ELECT	330MF	20%	25V
C648	1-136-165-00	FILM	0.1MF	5%	50V
C649	1-137-370-11	FILM	0.01MF	5%	50V
C650	1-126-964-11	ELECT	10MF	20%	50V
C651	1-136-165-00	FILM	0.1MF	5%	50V
C652	1-137-370-11	FILM	0.01MF	5%	50V
C660	⚠1-113-924-91	CERAMIC	0.0047MF	20%	250V
C661	⚠1-113-924-91	CERAMIC	0.0047MF	20%	250V
C662	⚠1-107-533-51	FILM	1MF	20%	250V
C667	⚠1-113-924-91	CERAMIC	0.0047MF	20%	250V
C668	⚠1-113-924-91	CERAMIC	0.0047MF	20%	250V
C670	1-107-673-11	ELECT	47MF	20%	400V
C671	1-162-318-11	CERAMIC	0.001MF	10%	500V
C672	1-106-220-00	MYLAR	0.1MF	10%	100V
C674	1-126-967-11	ELECT	47MF	20%	10V
C675	1-137-370-11	FILM	0.01MF	5%	50V
C676	1-104-346-11	ELECT	1000MF		200V
C677	1-104-346-11	ELECT	1000MF		200V
C678	1-137-399-11	FILM	0.1MF	5%	50V
C679	1-113-920-11	CERAMIC	0.0022MF	20%	250V
C680	⚠1-113-905-91	CERAMIC	220PF	10%	250V
C681	⚠1-113-905-91	CERAMIC	220PF	10%	250V

<CONNECTOR>

CN601	*1-580-843-11	PIN, CONNECTOR (POWER)
CN602	1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P
CN603	*1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P
CN604	*1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P
CN605	*1-564-510-11	PLUG, CONNECTOR 7P
CN606	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P
CN607	*1-564-507-11	PLUG, CONNECTOR 4P
CN608	*1-508-786-00	PIN, CONNECTOR (5mm PITCH) 2P
CN612	1-695-915-11	TAB (CONTACT)

<DIODE>

D601	8-719-022-99	DIODE D6SB60L
D603	8-719-302-98	DIODE RG4C
D604	8-719-979-58	DIODE EGP10D
D605	8-719-991-33	DIODE 1SS133T-77
D607	8-719-979-58	DIODE EGP10D
D608	8-719-029-04	DIODE D5L60
D620	8-719-029-04	DIODE D5L60
D621	8-719-045-48	DIODE FML-G12S
D622	8-719-045-48	DIODE FML-G12S
D623	8-719-920-67	DIODE ERC91-02
D625	8-719-991-33	DIODE 1SS133T-77
D630	8-719-991-33	DIODE 1SS133T-77
D631	8-719-991-33	DIODE 1SS133T-77
D641	⚠8-719-991-33	DIODE 1SS133T-77
D643	8-719-991-33	DIODE 1SS133T-77
D644	8-719-991-33	DIODE 1SS133T-77
D645	8-719-991-33	DIODE 1SS133T-77
D660	8-719-510-53	DIODE D4SB60L
D661	8-719-059-23	DIODE P6KE200AG23

REF. NO.	PART NO.	DESCRIPTION	REMARK
D662	8-719-979-64	DIODE UF4005PKG23	
D663	8-719-510-48	DIODE D1N20R	
D664	8-719-921-63	DIODE MTZJ-7.5B	
D665	8-719-979-84	DIODE EGP20DPKG23	
D667	8-719-109-89	DIODE RD5.6ESB2	

<FUSE>

F601	⚠1-576-232-11	FUSE (H.B.C.) (5A/250V)
	1-533-223-11	HOLDER, FUSE ; F601

<FERRITE BEAD>

FB601	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB602	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB603	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB605	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB607	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB608	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB609	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB610	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB611	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB621	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB622	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB623	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB660	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH

<IC>

IC601	8-749-925-03	IC STR-M6524
IC620	8-749-010-47	IC STR-S3115
IC641	8-759-701-56	IC NJM78M05FA
IC642	8-759-908-15	IC TL431CLP
IC643	8-759-921-10	IC SN74HC86AN
IC660	8-759-446-73	IC PWR-TOP200YAI-BB

<COIL>

L601	1-459-946-11	COIL, NOISE FILTER
L621	1-412-527-11	INDUCTOR 15UH
L622	1-412-533-21	INDUCTOR 47UH
L623	1-412-527-11	INDUCTOR 15UH
L624	1-412-527-11	INDUCTOR 15UH
L641	1-412-533-21	INDUCTOR 47UH

<PHOTO COUPLER>

PH602	⚠8-749-923-50	PHOTO COUPLER PC111YS
PH660	8-749-923-50	PHOTO COUPLER PC111YS
PH661	8-749-923-50	PHOTO COUPLER PC111YS

<IC LINK>

PS620	⚠1-532-686-91	LINK, IC (2.7A/150V)
PS621	⚠1-532-686-91	LINK, IC (2.7A/150V)
PS622	⚠1-532-984-91	LINK, IC (2A/90V)
PS623	⚠1-532-984-91	LINK, IC (2A/90V)

<TRANSISTOR>

Q601	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q602	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q620	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q621	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q622	8-729-029-86	TRANSISTOR DTC124ESA
Q641	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q642	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q643	8-729-119-78	TRANSISTOR 2SC2785-HFE

G **C**

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK	
Q644	8-729-029-86	TRANSISTOR DTC124ESA				
Q660	8-729-119-78	TRANSISTOR 2SC2785-HFE				

<RESISTOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK	
R601	⚠1-202-885-91	SOLID	1M	20%	1/2W	
R602	1-215-929-11	METAL OXIDE	100K	5%	3W	F
R603	1-216-492-11	METAL OXIDE	82K	5%	3W	F
R604	1-215-929-11	METAL OXIDE	100K	5%	3W	F
R605	1-216-384-11	METAL OXIDE	0.39	5%	3W	F
R606	1-216-384-11	METAL OXIDE	0.39	5%	3W	F
R607	1-249-415-11	CARBON	680	5%	1/4W	
R608	1-249-418-11	CARBON	1.2K	5%	1/4W	
R609	1-249-437-11	CARBON	47K	5%	1/4W	F
R610	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R611	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R613	1-249-417-11	CARBON	1K	5%	1/4W	
R614	1-249-385-11	CARBON	2.2	5%	1/4W	F
R615	1-249-417-11	CARBON	1K	5%	1/4W	
R616	1-249-417-11	CARBON	1K	5%	1/4W	
R617	1-249-407-11	CARBON	150	5%	1/4W	
R618	1-249-419-11	CARBON	1.5K	5%	1/4W	
R619	1-249-421-11	CARBON	2.2K	5%	1/4W	
R627	1-249-377-11	CARBON	0.47	5%	1/4W	F
R628	1-249-377-11	CARBON	0.47	5%	1/4W	F
R629	1-249-377-11	CARBON	0.47	5%	1/4W	F
R630	1-249-437-11	CARBON	47K	5%	1/4W	
R631	1-215-462-00	METAL	51K	1%	1/4W	
R632	1-216-381-11	METAL OXIDE	0.22	5%	3W	F
R633	1-216-381-11	METAL OXIDE	0.22	5%	3W	F
R634	1-215-431-00	METAL	2.7K	1%	1/4W	
R636	1-216-482-11	METAL OXIDE	1.8K	5%	3W	F
R637	1-216-357-00	METAL OXIDE	4.7	5%	1W	F
R638	1-249-428-11	CARBON	8.2K	5%	1/4W	
R639	1-247-899-11	CARBON	680K	5%	1/4W	
R640	1-249-429-11	CARBON	10K	5%	1/4W	
R641	1-249-421-11	CARBON	2.2K	5%	1/4W	
R643	1-247-843-11	CARBON	3.3K	5%	1/4W	
R644	1-249-427-11	CARBON	6.8K	5%	1/4W	
R645	1-247-863-91	CARBON	22K	5%	1/4W	
R646	1-247-843-11	CARBON	3.3K	5%	1/4W	
R647	1-249-429-11	CARBON	10K	5%	1/4W	
R648	1-215-465-00	METAL	68K	1%	1/4W	
R649	1-247-895-91	CARBON	470K	5%	1/4W	
R650	1-247-897-11	CARBON	560K	5%	1/4W	
R651	1-249-439-11	CARBON	68K	5%	1/4W	
R652	1-215-452-00	METAL	20K	1%	1/4W	
R653	1-249-411-11	CARBON	330	5%	1/4W	
R654	1-249-429-11	CARBON	10K	5%	1/4W	
R655	1-249-434-11	CARBON	27K	5%	1/4W	
R656	1-249-417-11	CARBON	1K	5%	1/4W	
R657	1-212-883-00	FUSIBLE	120	5%	1/4W	F
R658	1-249-417-11	CARBON	1K	5%	1/4W	
R660	1-247-903-00	CARBON	1M	5%	1/4W	
R661	1-216-492-11	METAL OXIDE	82K	5%	3W	F
R662	1-247-883-00	CARBON	150K	5%	1/4W	
R663	1-247-883-00	CARBON	150K	5%	1/4W	
R664	1-247-883-00	CARBON	150K	5%	1/4W	
R665	1-247-883-00	CARBON	150K	5%	1/4W	
R667	1-202-981-11	WIREWOUND	0.82	5%	20W	
R668	1-205-998-11	WIREWOUND	1	5%	10W	
R669	1-249-377-11	CARBON	0.47	5%	1/4W	F
R673	1-249-391-11	CARBON	6.8	5%	1/4W	
R674	1-215-481-00	METAL	330K	1%	1/4W	
R675	1-215-479-00	METAL	270K	1%	1/4W	
R676	1-215-451-00	METAL	18K	1%	1/4W	
R677	1-249-429-11	CARBON	10K	5%	1/4W	
R678	1-249-428-11	CARBON	8.2K	5%	1/4W	
R681	1-247-843-11	CARBON	3.3K	5%	1/4W	
R682	1-249-437-11	CARBON	47K	5%	1/4W	
R683	1-249-436-11	CARBON	39K	5%	1/4W	
R684	1-247-807-31	CARBON	100	5%	1/4W	

<RELAY>

RY601	⚠1-515-849-11	RELAY
RY602	⚠1-515-738-11	RELAY
RY603	1-515-849-11	RELAY
RY604	1-515-849-11	RELAY

<TRANSFORMER>

T601	⚠1-424-248-11	TRANSFORMER, LINE FILTER
T602	⚠1-424-248-11	TRANSFORMER, LINE FILTER
T603	⚠1-431-198-11	TRANSFORMER, CONVERTER (SRT)
T604	⚠1-427-657-11	TRANSFORMER, CONVERTER (SRT)
T605	⚠1-424-248-11	TRANSFORMER, LINE FILTER
T606	⚠1-424-248-11	TRANSFORMER, LINE FILTER

<THERMISTOR>

THP601	⚠1-809-827-11	THERMISTOR, POSITIVE
THP602	⚠1-809-827-11	THERMISTOR, POSITIVE

<VARISTOR>

VDR601	⚠1-801-073-41	VARISTOR ERZV14D471

****

*A-1331-624-A C BOARD, COMPLETE
****

7-682-947-01 SCREW +PSW 3X6

<CAPACITOR>

C701	1-107-961-91	ELECT	10MF	20%	250V
C702	1-107-961-91	ELECT	10MF	20%	250V
C703	1-107-652-11	ELECT	10MF	20%	250V
C704	1-107-908-11	ELECT	33MF	20%	16V
C705	1-107-908-11	ELECT	33MF	20%	16V
C706	1-126-966-11	ELECT	33MF	20%	16V
C707	1-102-129-00	CERAMIC	0.01MF	10%	50V
C708	1-102-129-00	CERAMIC	0.01MF	10%	50V
C709	1-102-129-00	CERAMIC	0.01MF	10%	50V
C710	1-126-933-11	ELECT	100MF	20%	16V
C711	1-102-157-00	CERAMIC	560PF	10%	500V
C712	1-102-157-00	CERAMIC	560PF	10%	500V
C713	1-102-157-00	CERAMIC	560PF	10%	500V
C714	1-162-116-00	CERAMIC	680PF	10%	2KV
C715	1-162-116-00	CERAMIC	680PF	10%	2KV
C716	1-107-652-11	ELECT	10MF	20%	250V
C717	1-126-933-11	ELECT	100MF	20%	16V
C718	1-126-961-11	ELECT	2.2MF	20%	50V
C719	1-126-964-11	ELECT	10MF	20%	50V
C720	1-162-117-00	CERAMIC	100PF	10%	500V
C721	1-101-884-00	CERAMIC	56PF	5%	50V
C722	1-102-943-00	CERAMIC	6PF	0.5PF	50V
C723	1-102-510-11	CERAMIC	12PF	5%	50V
C724	1-102-510-11	CERAMIC	12PF	5%	50V

<CONNECTOR>

CN701	*1-564-508-11	PLUG, CONNECTOR 5P
CN702	*1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF. NO.	PART NO.	DESCRIPTION				REMARK
CN703	* 1-564-507-11	PLUG, CONNECTOR 4P				
		<DIODE>				
D701	8-719-911-19	DIODE 1SS119-25				
D702	8-719-901-83	DIODE 1SS83				
D703	8-719-901-83	DIODE 1SS83				
D704	8-719-901-83	DIODE 1SS83				
D705	8-719-121-24	DIODE RD9.1ESL				
D706	8-719-908-03	DIODE GP08D				
D707	8-719-911-19	DIODE 1SS119-25				
D708	8-719-911-19	DIODE 1SS119-25				
D709	8-719-911-19	DIODE 1SS119-25				
D710	8-719-911-19	DIODE 1SS119-25				
		<IC>				
IC701	8-759-360-83	IC TDA6111Q/N4				
IC702	8-759-360-83	IC TDA6111Q/N4				
IC703	8-759-360-83	IC TDA6111Q/N4				
		<JACK>				
J701	⚠ 1-540-223-11	SOCKET, PICTURE TUBE				
		<COIL>				
L701	1-410-466-41	INDUCTOR 4.7UH				
L702	1-410-466-41	INDUCTOR 4.7UH				
L703	1-410-466-41	INDUCTOR 4.7UH				
L704	1-410-671-31	INDUCTOR 47UH				
		<TRANSISTOR>				
Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q702	8-729-900-89	TRANSISTOR DTC144ES				
Q703	8-729-900-89	TRANSISTOR DTC144ES				
Q704	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q706	8-729-823-81	TRANSISTOR 2SC4632LS-CB7				
		<RESISTOR>				
R701	1-249-414-11	CARBON	560	5%	1/4W	
R702	1-249-414-11	CARBON	560	5%	1/4W	
R703	1-249-414-11	CARBON	560	5%	1/4W	
R704	1-249-417-11	CARBON	1K	5%	1/4W	
R705	1-249-417-11	CARBON	1K	5%	1/4W	
R706	1-249-417-11	CARBON	1K	5%	1/4W	
R707	1-215-926-00	METAL OXIDE	33K	5%	3W	F
R708	1-215-926-00	METAL OXIDE	33K	5%	3W	F
R709	1-215-926-00	METAL OXIDE	33K	5%	3W	F
R710	1-249-417-11	CARBON	1K	5%	1/4W	
R711	1-249-417-11	CARBON	1K	5%	1/4W	
R712	1-249-417-11	CARBON	1K	5%	1/4W	
R713	1-247-807-31	CARBON	100	5%	1/4W	
R714	1-247-807-31	CARBON	100	5%	1/4W	
R715	1-247-807-31	CARBON	100	5%	1/4W	
R716	1-202-557-00	SOLID	220	20%	1/2W	
R717	1-202-557-00	SOLID	220	20%	1/2W	
R718	1-202-557-00	SOLID	220	20%	1/2W	
R719	1-249-424-11	CARBON	3.9K	5%	1/4W	
R720	1-249-424-11	CARBON	3.9K	5%	1/4W	
R721	1-249-424-11	CARBON	3.9K	5%	1/4W	
R722	1-249-430-11	CARBON	12K	5%	1/4W	
R723	1-249-425-11	CARBON	4.7K	5%	1/4W	
R724	1-249-437-11	CARBON	47K	5%	1/4W	
R725	1-249-429-11	CARBON	10K	5%	1/4W	
R726	1-249-429-11	CARBON	10K	5%	1/4W	

REF. NO.	PART NO.	DESCRIPTION				REMARK
R727	1-247-807-31	CARBON	100	5%	1/4W	
R728	1-249-417-11	CARBON	1K	5%	1/4W	
R729	1-249-417-11	CARBON	1K	5%	1/4W	
R730	1-249-427-11	CARBON	6.8K	5%	1/4W	
R731	1-249-426-11	CARBON	5.6K	5%	1/4W	
R732	1-247-843-11	CARBON	3.3K	5%	1/4W	
R733	1-249-429-11	CARBON	10K	5%	1/4W	
R734	1-202-722-00	SOLID	1.8M	20%	1/2W	
R735	1-202-722-00	SOLID	1.8M	20%	1/2W	
R748	1-202-842-11	SOLID	220K	20%	1/2W	
R749	1-216-373-11	METAL OXIDE	2.2	5%	2W	F
R750	1-202-549-00	SOLID	100	20%	1/2W	
R751	1-202-838-00	SOLID	100K	20%	1/2W	
R752	1-202-846-00	SOLID	470K	20%	1/2W	
R753	1-202-846-00	SOLID	470K	20%	1/2W	
R754	1-202-549-00	SOLID	100	20%	1/2W	
R755	1-202-842-11	SOLID	220K	20%	1/2W	
R756	1-202-818-00	SOLID	1K	20%	1/2W	
R757	1-202-838-00	SOLID	100K	20%	1/2W	
R758	1-202-549-00	SOLID	100	20%	1/2W	
		<VARIABLE RESISTOR>				
RV701	1-241-714-11	RES, ADJ, METAL FILM 110M				
RV702	1-238-019-11	RES, ADJ, CARBON 47K				
		<TERMINAL BOARD>				
TB701	1-695-915-11	TAB (CONTACT)				
TB702	1-695-915-11	TAB (CONTACT)				

****

* A-1342-315-A V BOARD, COMPLETE
****

		<CAPACITOR>			
C901	1-126-968-11	ELECT	100MF	20%	50V
C902	1-136-177-00	FILM	1MF	5%	50V
		<CONNECTOR>			
CN901	* 1-564-512-11	PLUG, CONNECTOR 9P			
		<RESISTOR>			
R901	1-215-445-00	METAL	10K	1%	1/4W
R902	1-215-455-00	METAL	27K	1%	1/4W
		<VARIABLE RESISTOR>			
RV901	* 1-238-076-11	RES, ADJ, METAL GLAZE 4.7K			

****

* A-1346-563-A D BOARD, COMPLETE
****

		<CAPACITOR>			
C1701	1-126-967-11	ELECT	47MF	20%	16V
C1704	1-136-153-00	FILM	0.01MF	5%	50V
C1705	1-136-165-00	FILM	0.1MF	5%	50V
C1707	1-107-884-11	ELECT	1000MF	20%	16V
C1709	1-129-765-00	FILM	0.047MF	10%	200V

D

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1710	1-136-177-00	FILM	1MF	5%	50V
C1711	1-137-150-11	MYLAR	0.01MF	10%	100V
C1712	1-107-905-11	ELECT	4.7MF	20%	50V
C1713	1-137-350-11	MYLAR	0.015MF	10%	100V
C1714	1-126-964-11	ELECT	10MF	20%	50V
C1715	1-107-906-11	ELECT	10MF	20%	50V
C1716	1-126-965-11	ELECT	22MF	20%	50V
C1717	1-126-963-11	ELECT	4.7MF	20%	50V
C1718	1-126-967-11	ELECT	47MF	20%	16V
C1719	1-136-165-00	FILM	0.1MF	5%	50V
C1720	1-126-935-11	ELECT	470MF	20%	16V
C1722	1-128-526-11	ELECT	100MF	20%	16V
C1723	1-126-964-11	ELECT	10MF	20%	50V
C1724	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1725	1-136-153-00	FILM	0.01MF	5%	50V
C1726	1-136-157-00	FILM	0.022MF	5%	50V
C1734	1-126-964-11	ELECT	10MF	20%	50V
C1735	1-126-964-11	ELECT	10MF	20%	50V
C1736	1-111-230-11	ELECT	1MF	20%	160V
C1737	1-136-153-00	FILM	0.01MF	5%	50V
C1738	1-126-964-11	ELECT	10MF	20%	50V
C1739	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1740	1-130-202-00	FILM	0.022MF	10%	400V
C1741	1-129-702-00	FILM	0.001MF	10%	630V
C1742	1-126-767-11	ELECT	1000MF	20%	16V
C1743	1-130-483-00	MYLAR	0.01MF	5%	50V
C1745	1-130-479-00	MYLAR	0.0047MF	5%	50V
C1746	1-102-112-00	CERAMIC	330PF	10%	50V
		<CONNECTOR>			
CN1701	*1-573-299-11	CONNECTOR, BOARD TO BOARD 10P			
CN1702	*1-573-299-11	CONNECTOR, BOARD TO BOARD 10P			
CN1703	1-564-524-11	PLUG, CONNECTOR 9P			
		<DIODE>			
D1705	8-719-987-87	DIODE ERA85-009			
D1706	8-719-980-78	DIODE ERA83-006			
D1707	8-719-980-78	DIODE ERA83-006			
D1708	8-719-911-19	DIODE 1SS119-25			
D1709	8-719-911-19	DIODE 1SS119-25			
D1710	8-719-911-19	DIODE 1SS119-25			
D1711	8-719-302-43	DIODE EL1Z			
D1712	8-719-911-19	DIODE 1SS119-25			
D1716	8-719-911-19	DIODE 1SS119-25			
D1717	8-719-929-15	DIODE HZS9.1NB2			
D1731	8-719-911-19	DIODE 1SS119-25			
D1732	8-719-911-19	DIODE 1SS119-25			
D1733	8-719-302-43	DIODE EL1Z			
D1736	8-719-980-78	DIODE ERA83-006			
D1738	8-719-911-19	DIODE 1SS119-25			
		<CONNECTOR>			
DY2	*1-560-436-00	HORIZONTAL PIN ASSY 3P			
		<IC>			
IC1701	8-759-168-20	IC TA78L09S			
IC1702	8-752-052-88	IC CXA1526P			
IC1703	8-759-135-80	IC uPC358C			
IC1704	8-759-135-80	IC uPC358C			
IC1731	8-759-135-80	IC uPC358C			
IC1733	8-759-103-93	IC uPC393C			
		<COIL>			
L1701	1-406-666-21	COIL, CHOKE 150UH			

REF. NO.	PART NO.	DESCRIPTION			REMARK	
L1702	1-406-986-11	COIL, CHOKE 3.3mH				
L1703	1-410-093-11	INDUCTOR 33mH				
L1732	1-406-986-11	COIL, CHOKE 3.3mH				
		<TRANSISTOR>				
Q1702	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q1703	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1704	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1705	8-729-024-95	TRANSISTOR 2SB1565EF				
Q1706	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1707	8-729-024-95	TRANSISTOR 2SB1565EF				
Q1708	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q1709	8-729-019-01	TRANSISTOR 2SD2394-EF				
	4-382-854-11	SCREW (M3X10), P, SW (+) ; Q1709				
Q1710	8-729-140-96	TRANSISTOR 2SD774-34				
Q1711	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1712	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1713	8-729-140-96	TRANSISTOR 2SD774-34				
Q1736	8-729-119-80	TRANSISTOR 2SC2688-LK				
Q1737	8-729-119-80	TRANSISTOR 2SC2688-LK				
Q1738	8-729-140-97	TRANSISTOR 2SB734-34				
Q1739	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q1740	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1743	8-729-921-43	TRANSISTOR IRF840				
Q1744	8-729-119-76	TRANSISTOR 2SA1175-HFE				
		<RESISTOR>				
R1575	1-247-843-11	CARBON	3.3K	5%	1/4W	
R1701	1-247-815-91	CARBON	220	5%	1/4W	
R1702	1-247-815-91	CARBON	220	5%	1/4W	
R1704	1-247-891-00	CARBON	330K	5%	1/4W	
R1708	1-215-463-00	METAL	56K	1%	1/4W	
R1709	1-247-843-11	CARBON	3.3K	5%	1/4W	
R1710	1-249-413-11	CARBON	470	5%	1/4W	
R1711	1-249-434-11	CARBON	27K	5%	1/4W	
R1712	1-249-440-11	CARBON	82K	5%	1/4W	
R1713	1-247-843-11	CARBON	3.3K	5%	1/4W	
R1714	1-249-429-11	CARBON	10K	5%	1/4W	
R1715	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1716	1-249-417-11	CARBON	1K	5%	1/4W	
R1717	1-249-422-11	CARBON	2.7K	5%	1/4W	
R1718	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1720	1-247-843-11	CARBON	3.3K	5%	1/4W	
R1721	1-216-377-11	METAL OXIDE	4.7	5%	2W	F
R1722	1-247-843-11	CARBON	3.3K	5%	1/4W	
R1724	1-247-843-11	CARBON	3.3K	5%	1/4W	
R1725	1-215-882-00	METAL OXIDE	22	5%	2W	F
R1728	1-249-441-11	CARBON	100K	5%	1/4W	
R1729	1-249-414-11	CARBON	560	5%	1/4W	
R1731	1-249-426-11	CARBON	5.6K	5%	1/4W	
R1733	1-247-843-11	CARBON	3.3K	5%	1/4W	
R1734	1-247-863-91	CARBON	22K	5%	1/4W	
R1735	1-249-393-11	CARBON	10	5%	1/4W	
R1736	1-249-435-11	CARBON	33K	5%	1/4W	
R1737	1-249-435-11	CARBON	33K	5%	1/4W	
R1738	1-215-857-11	METAL OXIDE	10	5%	1W	F
R1739	1-249-410-11	CARBON	270	5%	1/4W	
R1740	1-249-429-11	CARBON	10K	5%	1/4W	
R1741	1-249-437-11	CARBON	47K	5%	1/4W	
R1742	1-249-429-11	CARBON	10K	5%	1/4W	
R1743	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1744	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1745	1-249-417-11	CARBON	1K	5%	1/4W	
R1746	1-249-393-11	CARBON	10	5%	1/4W	
R1750	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1751	1-249-439-11	CARBON	68K	5%	1/4W	
R1752	1-249-437-11	CARBON	47K	5%	1/4W	

REF. NO.	PART NO.	DESCRIPTION			REMARK	
R1753	1-249-437-11	CARBON	47K	5%	1/4W	
R1754	1-249-437-11	CARBON	47K	5%	1/4W	
R1756	1-249-430-11	CARBON	12K	5%	1/4W	
R1757	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1758	1-249-429-11	CARBON	10K	5%	1/4W	
R1759	1-247-895-91	CARBON	470K	5%	1/4W	
R1760	1-249-435-11	CARBON	33K	5%	1/4W	
R1761	1-249-437-11	CARBON	47K	5%	1/4W	
R1762	1-249-429-11	CARBON	10K	5%	1/4W	
R1763	1-249-430-11	CARBON	12K	5%	1/4W	
R1764	1-215-470-00	METAL	110K	1%	1/4W	
R1765	1-247-863-91	CARBON	22K	5%	1/4W	
R1766	1-215-477-00	METAL	220K	1%	1/4W	
R1767	1-249-417-11	CARBON	1K	5%	1/4W	
R1768	1-215-429-00	METAL	2.2K	1%	1/4W	
R1769	1-215-447-00	METAL	12K	1%	1/4W	
R1770	1-215-439-00	METAL	5.6K	1%	1/4W	
R1772	1-215-433-00	METAL	3.3K	1%	1/4W	
R1773	1-247-903-00	CARBON	1M	5%	1/4W	
R1774	1-249-429-11	CARBON	10K	5%	1/4W	
R1775	1-249-431-11	CARBON	15K	5%	1/4W	
R1777	1-249-439-11	CARBON	68K	5%	1/4W	
R1779	1-215-461-00	METAL	47K	1%	1/4W	
R1780	1-249-417-11	CARBON	1K	5%	1/4W	F
R1781	1-215-875-11	METAL OXIDE	10K	5%	1W	F
R1782	1-216-454-11	METAL OXIDE	390	5%	2W	F
R1788	1-247-843-11	CARBON	3.3K	5%	1/4W	
R1789	1-249-413-11	CARBON	470	5%	1/4W	
R1790	1-249-415-11	CARBON	680	5%	1/4W	
R1791	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1792	1-249-415-11	CARBON	680	5%	1/4W	
R1793	1-249-440-11	CARBON	82K	5%	1/4W	
R1794	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1797	1-249-417-11	CARBON	1K	5%	1/4W	
R1798	1-249-404-00	CARBON	82	5%	1/4W	

****

* A-1346-564-A DA BOARD, COMPLETE

****

<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
C505	1-130-491-00	MYLAR	0.047MF	5%	50V
C507	1-136-165-00	FILM	0.1MF	5%	50V
C508	1-130-469-00	MYLAR	680PF	5%	50V
C530	1-126-964-11	ELECT	10MF	20%	50V
C531	1-104-665-11	ELECT	100MF	20%	25V
C535	1-136-161-00	FILM	0.047MF	5%	50V
C536	1-126-963-11	ELECT	4.7MF	20%	50V
C537	1-126-934-11	ELECT	220MF	20%	16V
C538	1-126-934-11	ELECT	220MF	20%	16V
C539	1-126-933-11	ELECT	100MF	20%	16V
C541	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C542	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C543	1-136-157-00	FILM	0.022MF	5%	50V
C545	1-126-964-11	ELECT	10MF	20%	50V
C546	1-136-157-00	FILM	0.022MF	5%	50V
C547	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C548	1-107-901-11	ELECT	0.47MF	20%	50V
C549	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C552	1-126-964-11	ELECT	10MF	20%	50V
C554	1-136-161-00	FILM	0.047MF	5%	50V
C556	1-126-933-11	ELECT	100MF	20%	16V
C557	1-102-973-00	CERAMIC	100PF	5%	50V
C561	1-102-111-00	CERAMIC	270PF	10%	50V
C563	1-126-934-11	ELECT	220MF	20%	16V
C565	1-130-483-00	MYLAR	0.01MF	5%	50V
C566	1-130-491-00	MYLAR	0.047MF	5%	50V
C567	1-130-475-00	MYLAR	0.0022MF	5%	50V
C571	1-126-934-11	ELECT	220MF	20%	16V
C591	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C592	1-126-933-11	ELECT	100MF	20%	16V
C1850	1-136-153-00	FILM	0.01MF	5%	50V
C1851	1-126-967-11	ELECT	47MF	20%	50V
C1852	1-126-967-11	ELECT	47MF	20%	50V

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION
CN501	1-573-300-11	CONNECTOR, BOARD TO BOARD 18P
CN502	* 1-573-299-11	CONNECTOR, BOARD TO BOARD 10P
CN503	1-564-517-11	PLUG, CONNECTOR 2P

<DIODE>

REF. NO.	PART NO.	DESCRIPTION
D501	8-719-404-49	DIODE MA111
D502	8-719-404-49	DIODE MA111
D505	8-719-110-72	DIODE RD30ESB2
D507	8-719-404-49	DIODE MA111
D516	8-719-901-83	DIODE 1SS83
D519	8-719-404-49	DIODE MA111
D526	8-719-109-97	DIODE RD6.8ESB2
D553	8-719-404-49	DIODE MA111
D554	8-719-109-54	DIODE RD2.2ESB2
D555	8-719-404-49	DIODE MA111
D1850	8-719-404-49	DIODE MA111
D1851	8-719-404-49	DIODE MA111

<IC>

REF. NO.	PART NO.	DESCRIPTION
IC501	8-759-231-58	IC TA7812S
IC502	8-759-981-65	IC LM2903M
IC503	8-759-981-65	IC LM2903M
IC505	8-759-970-89	IC BA10358F
IC506	8-759-970-89	IC BA10358F
IC507	8-759-981-65	IC LM2903M
IC1850	8-759-970-89	IC BA10358F

<CHIP CONDUCTOR>

REF. NO.	PART NO.	DESCRIPTION
JR501	1-216-295-91	CONDUCTOR, CHIP
JR503	1-216-295-91	CONDUCTOR, CHIP

<TRANSISTOR>

REF. NO.	PART NO.	DESCRIPTION
Q510	8-729-216-22	TRANSISTOR 2SA1162-G
Q511	8-729-216-22	TRANSISTOR 2SA1162-G
Q513	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q514	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q515	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q517	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q518	8-729-216-22	TRANSISTOR 2SA1162-G
Q530	8-729-216-22	TRANSISTOR 2SA1162-G
Q531	8-729-216-22	TRANSISTOR 2SA1162-G
Q1850	8-729-140-93	TRANSISTOR 2SB733-34
Q1851	8-729-140-96	TRANSISTOR 2SD774-34
Q1852	8-729-216-22	TRANSISTOR 2SA1162-G
Q1853	8-729-120-28	TRANSISTOR 2SC1623-L5L6

<RESISTOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
R501	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R503	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R506	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R508	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W
R510	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R511	1-218-758-11	METAL CHIP	180K	0.50%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK	
R512	1-218-770-11	METAL CHIP	560K	0.50%	1/10W	
R513	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R514	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R515	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R519	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R520	1-216-691-11	METAL CHIP	47K	0.50%	1/10W	
R521	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R522	1-216-697-91	METAL CHIP	82K	0.50%	1/10W	
R524	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R525	1-216-295-91	CONDUCTOR, CHIP				
R532	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
R534	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R535	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R536	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R537	1-218-768-11	METAL CHIP	470K	0.50%	1/10W	
R538	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R539	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R546	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	
R547	1-216-691-11	METAL CHIP	47K	0.50%	1/10W	
R548	1-216-672-11	METAL CHIP	7.5K	0.50%	1/10W	
R549	1-216-697-91	METAL CHIP	82K	0.50%	1/10W	
R550	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	
R551	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W	
R552	1-216-678-11	METAL CHIP	13K	0.50%	1/10W	
R553	1-216-121-91	METAL GLAZE	1M	5%	1/10W	
R555	1-216-697-91	METAL CHIP	82K	0.50%	1/10W	
R556	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R557	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R558	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	
R560	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R561	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R562	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R563	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R564	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R565	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R566	1-249-410-11	CARBON	270	5%	1/4W	
R568	1-249-411-11	CARBON	330	5%	1/4W	
R570	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R571	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R579	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R580	1-218-764-11	METAL CHIP	330K	0.50%	1/10W	
R588	1-216-681-11	METAL CHIP	18K	0.50%	1/10W	
R589	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	
R1850	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R1851	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1852	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1853	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1854	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1855	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1856	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R1857	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R1858	1-249-381-11	CARBON	1	5%	1/4W	F
R1859	1-215-862-11	METAL OXIDE	68	5%	1W	F
R1860	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R1861	1-249-429-11	CARBON	10K	5%	1/4W	

****

* A-1372-297-A H3 BOARD, COMPLETE

****

<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
C871	1-126-924-11	ELECT	330MF	20%	10V
C872	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C873	1-124-589-11	ELECT	47MF	20%	10V
C874	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C875	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C876	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C877	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C878	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION
CN871	*1-564-518-11	PLUG, CONNECTOR 3P
CN872	*1-564-511-11	PLUG, CONNECTOR 8P
CN873	*1-564-513-11	PLUG, CONNECTOR 10P
CN874	*1-564-509-11	PLUG, CONNECTOR 6P
CN875	1-564-505-11	PLUG, CONNECTOR 2P
CN877	*1-573-299-11	CONNECTOR, BOARD TO BOARD 10P

<DIODE>

REF. NO.	PART NO.	DESCRIPTION
D871	8-719-404-49	DIODE MA111
D872	8-719-404-49	DIODE MA111
D873	8-719-404-49	DIODE MA111
D874	8-719-404-49	DIODE MA111
D875	8-719-404-49	DIODE MA111
D876	8-719-404-49	DIODE MA111
D877	8-719-404-49	DIODE MA111
D878	8-719-404-49	DIODE MA111
D879	8-719-404-49	DIODE MA111
D880	8-719-404-49	DIODE MA111
D881	8-719-404-49	DIODE MA111
D882	8-719-404-49	DIODE MA111

<IC>

REF. NO.	PART NO.	DESCRIPTION
IC871	8-759-467-84	IC MC68HC05P6SC442119B
IC872	8-759-058-62	IC TC7S08FU(TE85R)
IC873	8-759-058-62	IC TC7S08FU(TE85R)

<COIL>

REF. NO.	PART NO.	DESCRIPTION
L871	1-408-421-00	INDUCTOR 100UH
L872	1-408-429-00	INDUCTOR 470UH

<TRANSISTOR>

REF. NO.	PART NO.	DESCRIPTION
Q871	8-729-901-01	TRANSISTOR DTC144EK
Q872	8-729-901-98	TRANSISTOR 2SA1036K-R
Q873	8-729-901-98	TRANSISTOR 2SA1036K-R
Q874	8-729-901-01	TRANSISTOR DTC144EK
Q875	8-729-901-01	TRANSISTOR DTC144EK
Q876	8-729-901-01	TRANSISTOR DTC144EK
Q877	8-729-901-01	TRANSISTOR DTC144EK
Q878	8-729-901-04	TRANSISTOR DTA114EK

<RESISTOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
R871	1-216-294-00	METAL GLAZE	10M	5%	1/8W
R872	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R873	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R874	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R875	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R876	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R877	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R878	1-216-009-00	METAL GLAZE	22	5%	1/10W
R879	1-216-005-00	METAL GLAZE	15	5%	1/10W
R880	1-216-009-00	METAL GLAZE	22	5%	1/10W
R881	1-216-009-00	METAL GLAZE	22	5%	1/10W
R882	1-216-009-00	METAL GLAZE	22	5%	1/10W
R883	1-216-009-00	METAL GLAZE	22	5%	1/10W
R884	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R885	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R886	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R887	1-216-089-91	METAL GLAZE	47K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R888	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R889	1-216-037-00	METAL GLAZE	330	5%	1/10W

<CRYSTAL>

REF. NO.	PART NO.	DESCRIPTION	REMARK
X871	1-577-082-11	VIBRATOR, CERAMIC	

****

* A-1372-298-A H4 BOARD,COMPLETE

****

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
CN901	* 1-564-511-11	PLUG, CONNECTOR 8P	
CN902	* 1-563-865-21	SOCKET, CONNECTOR 30P	
CN903	1-774-525-11	SOCKET, CONNECTOR 64P	
CN904	* 1-564-509-11	PLUG, CONNECTOR 6P	

****

* A-1372-299-A H5 BOARD, COMPLETE

****

<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION		REMARK
C851	1-163-031-11	CERAMIC CHIP	0.01MF	50V

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
CN851	1-691-803-11	SOCKET, DIN	
CN852	1-564-523-11	PLUG, CONNECTOR 8P	

<RESISTOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
R851	1-216-025-91	METAL GLAZE	100	5%	1/10W
R852	1-216-025-91	METAL GLAZE	100	5%	1/10W

****

* A-1373-597-A U BOARD, COMPLETE

****

<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
C801	1-126-964-11	ELECT	10MF	20%	50V
C802	1-126-964-11	ELECT	10MF	20%	50V
C803	1-126-964-11	ELECT	10MF	20%	50V
C804	1-126-964-11	ELECT	10MF	20%	50V
C805	1-126-964-11	ELECT	10MF	20%	50V
C806	1-126-964-11	ELECT	10MF	20%	50V
C807	1-126-964-11	ELECT	10MF	20%	50V
C808	1-126-933-11	ELECT	100MF	20%	16V
C809	1-101-004-00	CERAMIC	0.01MF		50V
C810	1-126-967-11	ELECT	47MF	20%	16V
C811	1-102-129-00	CERAMIC	0.01MF	10%	50V
C812	1-126-964-11	ELECT	10MF	20%	50V
C813	1-126-964-11	ELECT	10MF	20%	50V
C814	1-126-964-11	ELECT	10MF	20%	50V
C815	1-126-964-11	ELECT	10MF	20%	50V
C816	1-102-074-00	CERAMIC	0.001MF	10%	50V
C820	1-102-973-00	CERAMIC	100PF	5%	50V
C822	1-102-973-00	CERAMIC	100PF	5%	50V
C825	1-102-129-00	CERAMIC	0.01MF	10%	50V

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
CN801	1-774-523-11	PIN, CONNECTOR (PC BOARD) 64P	

<DIODE>

REF. NO.	PART NO.	DESCRIPTION	REMARK
D801	8-719-110-17	DIODE RD10ESB2	
D802	8-719-110-17	DIODE RD10ESB2	
D803	8-719-110-17	DIODE RD10ESB2	
D804	8-719-110-17	DIODE RD10ESB2	
D805	8-719-110-17	DIODE RD10ESB2	
D806	8-719-110-17	DIODE RD10ESB2	
D807	8-719-110-17	DIODE RD10ESB2	
D810	8-719-911-19	DIODE 1SS119-25	
D811	8-719-911-19	DIODE 1SS119-25	
D812	8-719-911-19	DIODE 1SS119-25	
D813	8-719-911-19	DIODE 1SS119-25	
D815	8-719-911-19	DIODE 1SS119-25	
D816	8-719-911-19	DIODE 1SS119-25	
D817	8-719-911-19	DIODE 1SS119-25	
D818	8-719-911-19	DIODE 1SS119-25	
D819	8-719-911-19	DIODE 1SS119-25	
D820	8-719-911-19	DIODE 1SS119-25	
D821	8-719-911-19	DIODE 1SS119-25	
D822	8-719-911-19	DIODE 1SS119-25	

<FERRITE BEAD>

REF. NO.	PART NO.	DESCRIPTION	REMARK
FB801	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB802	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB803	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	

<IC>

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC801	8-759-065-85	IC MAX232N	
IC802	8-759-916-12	IC SN74HC00AN	

<JACK>

REF. NO.	PART NO.	DESCRIPTION	REMARK
J801	1-694-256-11	TERMINAL BOARD ASSY, I/O	
J811	1-778-042-11	JACK, PIN 2P	
J812	1-573-112-11	SOCKET, CONNECTOR 8P	

<TRANSISTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q802	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q803	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q804	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q805	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q806	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q807	8-729-119-78	TRANSISTOR 2SC2785-HFE	

<RESISTOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
R801	1-215-394-00	METAL	75	1%	1/4W
R802	1-215-394-00	METAL	75	1%	1/4W
R803	1-215-394-00	METAL	75	1%	1/4W
R804	1-249-431-11	CARBON	15K	5%	1/4W
R805	1-249-437-11	CARBON	47K	5%	1/4W
R806	1-249-417-11	CARBON	1K	5%	1/4W
R807	1-249-401-11	CARBON	47	5%	1/4W
R808	1-249-431-11	CARBON	15K	5%	1/4W
R809	1-249-437-11	CARBON	47K	5%	1/4W
R810	1-249-417-11	CARBON	1K	5%	1/4W
R811	1-249-401-11	CARBON	47	5%	1/4W
R812	1-249-431-11	CARBON	15K	5%	1/4W
R813	1-249-437-11	CARBON	47K	5%	1/4W
R814	1-249-417-11	CARBON	1K	5%	1/4W
R815	1-249-401-11	CARBON	47	5%	1/4W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R820	1-249-421-11	CARBON	2.2K	5%	1/4W
R821	1-247-887-00	CARBON	220K	5%	1/4W
R822	1-247-843-11	CARBON	3.3K	5%	1/4W
R823	1-249-417-11	CARBON	1K	5%	1/4W
R824	1-249-417-11	CARBON	1K	5%	1/4W
R825	1-249-421-11	CARBON	2.2K	5%	1/4W
R826	1-247-887-00	CARBON	220K	5%	1/4W
R827	1-247-843-11	CARBON	3.3K	5%	1/4W
R828	1-249-417-11	CARBON	1K	5%	1/4W
R829	1-249-417-11	CARBON	1K	5%	1/4W
R830	1-247-895-91	CARBON	470K	5%	1/4W
R832	1-247-807-31	CARBON	100	5%	1/4W
R833	1-247-895-91	CARBON	470K	5%	1/4W
R835	1-247-807-31	CARBON	100	5%	1/4W
R843	1-247-807-31	CARBON	100	5%	1/4W
R844	1-247-807-31	CARBON	100	5%	1/4W
R845	1-247-807-31	CARBON	100	5%	1/4W
R846	1-247-807-31	CARBON	100	5%	1/4W
R851	1-247-807-31	CARBON	100	5%	1/4W
R852	1-247-807-31	CARBON	100	5%	1/4W

****

* A-1373-599-A UA BOARD, COMPLETE

****

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION
CN1101	1-564-593-11	PLUG, CONNECTOR 14P
CN1102	* 1-564-520-11	PLUG, CONNECTOR 5P
CN1103	1-564-523-11	PLUG, CONNECTOR 8P

<DIODE>

REF. NO.	PART NO.	DESCRIPTION
D1101	8-719-110-17	DIODE RD10ESB2
D1102	8-719-110-17	DIODE RD10ESB2
D1103	8-719-404-49	DIODE MA111

<JACK>

REF. NO.	PART NO.	DESCRIPTION
J1101	1-537-765-11	TERMINAL BOARD ASSY, I/O
J1106	1-573-969-11	JACK BLOCK, PIN
J1107	1-695-605-11	JACK, MINIATURE
J1108	1-695-605-11	JACK, MINIATURE
J1109	1-779-211-11	JACK, DC POWER

<COIL>

REF. NO.	PART NO.	DESCRIPTION
L1101	1-422-613-11	COIL, AIR CORE
L1102	1-422-613-11	COIL, AIR CORE
L1103	1-422-613-11	COIL, AIR CORE
L1104	1-422-613-11	COIL, AIR CORE

<TRANSISTOR>

REF. NO.	PART NO.	DESCRIPTION
Q1101	8-729-901-06	TRANSISTOR DTA144EK
Q1102	8-729-901-01	TRANSISTOR DTC144EK
Q1103	8-729-120-28	TRANSISTOR 2SC1623-L5L6

<RESISTOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1101	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R1102	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R1103	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1104	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1105	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1106	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1107	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1108	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W

<SWITCH>

REF. NO.	PART NO.	DESCRIPTION	REMARK
S1101	1-572-944-11	SWITCH,POWER VOLTAGE SELECTION	

<TERMINAL BOARD>

REF. NO.	PART NO.	DESCRIPTION
TB1101	1-537-187-11	TERMINAL, PUSH (4P)

****

* A-1394-831-A UT BOARD, COMPLETE

****

<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C2	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C3	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C4	1-126-933-11	ELECT	100MF	20%	10V
C5	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C6	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C7	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C8	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C9	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C10	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C11	1-130-477-00	FILM	0.0033MF	5%	50V
C12	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C13	1-126-933-11	ELECT	100MF	20%	10V
C14	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C15	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C16	1-163-224-11	CERAMIC CHIP	7PF	0.25PF	50V
C17	1-163-224-11	CERAMIC CHIP	7PF	0.25PF	50V
C18	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C19	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C21	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C22	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C23	1-126-967-11	ELECT	47MF	20%	16V
C24	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C31	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C32	1-126-967-11	ELECT	47MF	20%	16V
C33	1-126-961-11	ELECT	2.2MF	20%	50V
C34	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C35	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C36	1-126-960-11	ELECT	1MF	20%	50V
C37	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C38	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C39	1-126-960-11	ELECT	1MF	20%	50V
C42	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C43	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C44	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C51	1-126-964-11	ELECT	10MF	20%	50V
C52	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C53	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C54	1-126-964-11	ELECT	10MF	20%	50V
C55	1-126-960-11	ELECT	1MF	20%	50V
C56	1-126-960-11	ELECT	1MF	20%	50V
C57	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C58	1-126-963-11	ELECT	4.7MF	20%	50V
C59	1-126-960-11	ELECT	1MF	20%	50V
C60	1-126-960-11	ELECT	1MF	20%	50V
C61	1-126-967-11	ELECT	47MF	20%	16V
C62	1-126-964-11	ELECT	10MF	20%	50V
C63	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C64	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C65	1-126-964-11	ELECT	10MF	20%	50V
C66	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C67	1-126-967-11	ELECT	47MF	20%	16V
C70	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C71	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C72	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C73	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C74	1-126-960-11	ELECT	1MF	20%	50V
C75	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C76	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C77	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C78	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C79	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C80	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C81	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C82	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C83	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C84	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C85	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C86	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C87	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C88	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C89	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C90	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C91	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C92	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C93	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C94	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C95	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C96	1-126-935-11	ELECT	470MF	20%	16V
C97	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C98	1-126-964-11	ELECT	10MF	20%	50V
C101	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C102	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C103	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V
C104	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C105	1-109-953-11	ELECT	2.2MF	20%	50V
C106	1-126-967-11	ELECT	47MF	20%	16V
C107	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C108	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C109	1-126-967-11	ELECT	47MF	20%	16V
C110	1-126-967-11	ELECT	47MF	20%	16V
C111	1-126-967-11	ELECT	47MF	20%	16V
C112	1-126-933-11	ELECT	100MF	20%	16V
C113	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C114	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C115	1-126-967-11	ELECT	47MF	20%	16V
C116	1-126-933-11	ELECT	100MF	20%	16V
C117	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C118	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C119	1-126-933-11	ELECT	100MF	20%	16V
C120	1-126-967-11	ELECT	47MF	20%	16V
C121	1-126-933-11	ELECT	100MF	20%	16V
C122	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C123	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C124	1-126-933-11	ELECT	100MF	20%	16V
C125	1-126-933-11	ELECT	100MF	20%	16V
C126	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C127	1-126-767-11	ELECT	1000MF	20%	16V
C128	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C129	1-126-767-11	ELECT	1000MF	20%	16V
C130	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C131	1-126-767-11	ELECT	1000MF	20%	16V
C132	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C135	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C141	1-126-967-11	ELECT	47MF	20%	16V
C142	1-109-889-11	ELECT	1MF	20%	50V
C143	1-109-889-11	ELECT	1MF	20%	50V
C145	1-126-960-11	ELECT	1MF	20%	50V
C146	1-126-960-11	ELECT	1MF	20%	50V
C147	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C151	1-107-714-11	ELECT	10MF	20%	16V
C152	1-107-714-11	ELECT	10MF	20%	16V
C153	1-107-714-11	ELECT	10MF	20%	16V
C154	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C155	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C156	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C157	1-126-964-11	ELECT	10MF	20%	50V
C301	1-126-968-11	ELECT	100MF	20%	50V
C302	1-126-968-11	ELECT	100MF	20%	50V
C303	1-126-967-11	ELECT	47MF	20%	10V
C304	1-126-967-11	ELECT	47MF	20%	10V
C305	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C306	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C307	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C308	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C309	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C310	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C311	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C312	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C313	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C314	1-126-964-11	ELECT	10MF	20%	50V
C315	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C316	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C317	1-126-964-11	ELECT	10MF	20%	50V
C318	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C319	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C320	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C321	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C322	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C323	1-136-177-00	FILM	1MF	5%	50V
C324	1-126-964-11	ELECT	10MF	20%	50V
C325	1-126-960-11	ELECT	1MF	20%	50V
C326	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C327	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C328	1-126-960-11	ELECT	1MF	20%	50V
C329	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C330	1-126-960-11	ELECT	1MF	20%	50V
C331	1-136-165-00	FILM	0.1MF	5%	50V
C332	1-136-161-00	FILM	0.047MF	5%	50V
C333	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C334	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C335	1-126-964-11	ELECT	10MF	20%	50V
C401	1-126-941-11	ELECT	470MF	20%	25V
C402	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C403	1-126-941-11	ELECT	470MF	20%	25V
C404	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C405	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C406	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C407	1-115-419-11	CERAMIC CHIP	3300PF	5%	25V
C408	1-126-960-11	ELECT	1MF	20%	50V
C409	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C410	1-130-489-00	MYLAR	0.033MF	5%	50V
C411	1-136-165-00	FILM	0.1MF	5%	50V
C412	1-126-960-11	ELECT	1MF	20%	50V
C413	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C414	1-130-467-00	MYLAR	470PF	5%	50V
C415	1-137-366-11	FILM	0.0022MF	5%	50V
C416	1-126-960-11	ELECT	1MF	20%	50V
C417	1-136-153-00	FILM	0.01MF	5%	50V
C418	1-126-960-11	ELECT	1MF	20%	50V
C419	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C420	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C421	1-126-963-11	ELECT	4.7MF	20%	50V
C422	1-137-366-11	FILM	0.0022MF	5%	50V
C423	1-126-964-11	ELECT	10MF	20%	50V
C424	1-130-481-00	FILM	0.0068MF	5%	50V
C425	1-137-378-11	FILM	0.22MF	5%	50V
C427	1-130-489-00	FILM	0.033MF	5%	50V
C428	1-137-374-11	FILM	0.047MF	5%	50V
C430	1-163-031-11	CERAMIC CHIP	0.01MF		50V

UT

REF. NO.	PART NO.	DESCRIPTION	REMARK
C431	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C432	1-126-967-11	ELECT 47MF 20%	50V

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
CN1	*1-563-865-21	SOCKET, CONNECTOR 30P	
CN2	*1-564-511-11	PLUG, CONNECTOR 8P	
CN3	1-564-595-11	PLUG, CONNECTOR 14P	
CN4	*1-564-508-11	PLUG, CONNECTOR 5P	
CN5	*1-564-507-11	PLUG, CONNECTOR 4P	
CN6	1-779-210-11	PIN, CONNECTOR (PC BOARD) 32P	
CN7	1-779-210-11	PIN, CONNECTOR (PC BOARD) 32P	
CN8	*1-564-509-11	PLUG, CONNECTOR 6P	

<DIODE>

REF. NO.	PART NO.	DESCRIPTION	REMARK
D1	8-719-800-76	DIODE 1SS226	
D2	8-719-800-76	DIODE 1SS226	
D3	8-719-800-76	DIODE 1SS226	
D4	8-719-800-76	DIODE 1SS226	
D5	8-719-800-76	DIODE 1SS226	
D6	8-719-800-76	DIODE 1SS226	
D7	8-719-800-76	DIODE 1SS226	
D11	8-719-800-76	DIODE 1SS226	
D12	8-719-800-76	DIODE 1SS226	
D13	8-719-800-76	DIODE 1SS226	
D14	8-719-800-76	DIODE 1SS226	
D15	8-719-800-76	DIODE 1SS226	
D16	8-719-800-76	DIODE 1SS226	
D17	8-719-800-76	DIODE 1SS226	
D21	8-719-404-49	DIODE MA111	
D22	8-719-404-49	DIODE MA111	
D23	8-719-404-49	DIODE MA111	
D25	8-719-404-49	DIODE MA111	
D31	8-719-800-76	DIODE 1SS226	
D32	8-719-800-76	DIODE 1SS226	
D33	8-719-800-76	DIODE 1SS226	
D34	8-719-800-76	DIODE 1SS226	
D35	8-719-800-76	DIODE 1SS226	
D41	8-719-404-49	DIODE MA111	
D42	8-719-404-49	DIODE MA111	
D43	8-719-404-49	DIODE MA111	
D44	8-719-402-16	DIODE MA3100-TX	
D45	8-719-402-16	DIODE MA3100-TX	
D101	8-719-404-49	DIODE MA111	
D102	8-719-404-49	DIODE MA111	
D103	8-719-404-49	DIODE MA111	
D301	8-719-404-49	DIODE MA111	
D401	8-719-404-49	DIODE MA111	
D402	8-719-404-49	DIODE MA111	
D404	8-719-404-49	DIODE MA111	
D405	8-719-404-49	DIODE MA111	

<IC>

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC1	8-759-449-59	IC HD6473257F10-PGM1	
IC2	8-759-162-80	IC MM1170BFB	
IC3	8-759-032-26	IC MC74HC125AF	
IC4	8-759-156-54	IC X25040SI	
IC5	8-759-458-24	IC uPD6453GT-664-E2	
IC6	8-759-032-11	IC MC74HC04AF	
IC8	8-759-346-93	IC TA8184F(EL)	
IC9	8-752-073-52	IC CXA2016S	
IC10	8-752-067-05	IC CXA1739S	
IC11	8-759-300-71	IC HD14053BFP	
IC14	8-752-058-68	IC CXA1315M	
IC15	8-752-058-68	IC CXA1315M	
IC16	8-759-032-11	IC MC74HC04AF	
IC17	8-759-058-62	IC TC7S08FU(TE85R)	

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC18	8-759-011-65	IC MC74HC4053F	
IC19	8-759-011-65	IC MC74HC4053F	
IC20	8-759-082-58	IC TC7W08FU	
IC21	8-759-082-61	IC TC4W53FU	
IC22	8-759-300-71	IC HD14053BFP	
IC23	8-759-446-66	IC MM1113XFBE	
IC24	8-759-446-66	IC MM1113XFBE	
IC25	8-759-446-66	IC MM1113XFBE	
IC301	8-752-065-79	IC CXA1470AM-T6	
IC302	8-752-066-34	IC CXA1726M-T6	
IC303	8-759-041-45	IC DAC8840FS	
IC304	8-759-041-45	IC DAC8840FS	
IC305	8-759-080-95	IC M62353FP	
IC306	8-759-100-96	IC uPC4558G2	
IC307	8-759-100-96	IC uPC4558G2	
IC308	8-759-100-96	IC uPC4558G2	
IC309	8-759-100-96	IC uPC4558G2	
IC401	8-759-083-85	IC LA7856A	
IC402	8-759-100-96	IC uPC4558G2	

<COIL>

REF. NO.	PART NO.	DESCRIPTION	REMARK
L1	1-408-421-00	INDUCTOR 100UH	
L2	1-408-421-00	INDUCTOR 100UH	
L3	1-408-411-00	INDUCTOR 15UH	
L4	1-408-421-00	INDUCTOR 100UH	
L401	1-410-482-31	INDUCTOR 100UH	
L402	1-410-482-31	INDUCTOR 100UH	

<TRANSISTOR>

REF. NO.	PART NO.	DESCRIPTION	REMARK
Q1	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6	8-729-216-22	TRANSISTOR 2SA1162-G	
Q7	8-729-216-22	TRANSISTOR 2SA1162-G	
Q8	8-729-216-22	TRANSISTOR 2SA1162-G	
Q11	8-729-216-22	TRANSISTOR 2SA1162-G	
Q12	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q13	8-729-216-22	TRANSISTOR 2SA1162-G	
Q14	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q15	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q20	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q21	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q22	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q23	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q24	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q25	8-729-901-01	TRANSISTOR DTC144EK	
Q31	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q32	8-729-216-22	TRANSISTOR 2SA1162-G	
Q33	8-729-216-22	TRANSISTOR 2SA1162-G	
Q34	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q35	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q36	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q37	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q38	8-729-216-22	TRANSISTOR 2SA1162-G	
Q39	8-729-216-22	TRANSISTOR 2SA1162-G	
Q40	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q41	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q42	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q43	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q44	8-729-216-22	TRANSISTOR 2SA1162-G	
Q45	8-729-216-22	TRANSISTOR 2SA1162-G	
Q46	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q47	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q48	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q51	8-729-216-22	TRANSISTOR 2SA1162-G	
Q54	8-729-216-22	TRANSISTOR 2SA1162-G	
Q55	8-729-216-22	TRANSISTOR 2SA1162-G	
Q56	8-729-119-76	TRANSISTOR 2SA1175-HFE	

REF. NO.	PART NO.	DESCRIPTION			REMARK
Q57	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q301	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q302	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q303	8-729-901-04	TRANSISTOR DTA114EK			
Q304	8-729-901-04	TRANSISTOR DTA114EK			
Q401	8-729-216-22	TRANSISTOR 2SA1162-G			
Q402	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q403	8-729-216-22	TRANSISTOR 2SA1162-G			
Q405	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q406	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q407	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		<RESISTOR>			
R1	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R4	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R5	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R6	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R7	1-216-033-00	METAL GLAZE	220	5%	1/10W
R8	1-216-033-00	METAL GLAZE	220	5%	1/10W
R9	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R10	1-216-033-00	METAL GLAZE	220	5%	1/10W
R11	1-216-033-00	METAL GLAZE	220	5%	1/10W
R12	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R13	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R14	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R15	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R16	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R17	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R18	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R19	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R20	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R21	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R22	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R23	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R24	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R25	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R26	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R27	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R28	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R29	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R30	1-216-025-91	METAL GLAZE	100	5%	1/10W
R31	1-216-025-91	METAL GLAZE	100	5%	1/10W
R32	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R33	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R34	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R35	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R36	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R37	1-216-025-91	METAL GLAZE	100	5%	1/10W
R38	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R39	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R40	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R41	1-216-103-00	METAL GLAZE	180K	5%	1/10W
R42	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R43	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R44	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R45	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R46	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R47	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R48	1-216-033-00	METAL GLAZE	220	5%	1/10W
R49	1-216-033-00	METAL GLAZE	220	5%	1/10W
R51	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R55	1-216-037-00	METAL GLAZE	330	5%	1/10W
R56	1-216-025-91	METAL GLAZE	100	5%	1/10W
R59	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R60	1-216-295-91	CONDUCTOR, CHIP			

REF. NO.	PART NO.	DESCRIPTION			REMARK
R62	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R63	1-216-035-00	METAL GLAZE	270	5%	1/10W
R64	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R65	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R69	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R70	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R72	1-216-033-00	METAL GLAZE	220	5%	1/10W
R73	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R74	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R75	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R76	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R77	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R78	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R79	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R80	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R81	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R82	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R83	1-216-033-00	METAL GLAZE	220	5%	1/10W
R85	1-216-025-91	METAL GLAZE	100	5%	1/10W
R86	1-216-025-91	METAL GLAZE	100	5%	1/10W
R87	1-216-025-91	METAL GLAZE	100	5%	1/10W
R88	1-216-025-91	METAL GLAZE	100	5%	1/10W
R90	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R91	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R92	1-216-295-91	CONDUCTOR, CHIP			
R93	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R94	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R95	1-216-025-91	METAL GLAZE	100	5%	1/10W
R96	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R97	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R98	1-216-025-91	METAL GLAZE	100	5%	1/10W
R99	1-216-039-00	METAL GLAZE	390	5%	1/10W
R100	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R102	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R103	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R105	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R106	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R107	1-216-025-91	METAL GLAZE	100	5%	1/10W
R109	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R110	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R111	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R113	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R114	1-216-025-91	METAL GLAZE	100	5%	1/10W
R116	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R117	1-216-025-91	METAL GLAZE	100	5%	1/10W
R118	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R119	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R120	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R121	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R132	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R133	1-216-025-91	METAL GLAZE	100	5%	1/10W
R134	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R135	1-216-025-91	METAL GLAZE	100	5%	1/10W
R136	1-216-025-91	METAL GLAZE	100	5%	1/10W
R137	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R138	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R139	1-216-033-00	METAL GLAZE	220	5%	1/10W
R140	1-216-033-00	METAL GLAZE	220	5%	1/10W
R141	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R142	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R143	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R144	1-216-699-11	METAL CHIP	100K	0.50%	1/10W
R145	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R146	1-216-695-11	METAL CHIP	68K	0.50%	1/10W
R147	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R148	1-216-017-91	METAL GLAZE	47	5%	1/10W
R149	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R150	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W

UT

REF. NO.	PART NO.	DESCRIPTION			REMARK
R151	1-216-041-00	METAL GLAZE	470	5%	1/10W
R152	1-216-041-00	METAL GLAZE	470	5%	1/10W
R153	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R154	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R155	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R156	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R157	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R158	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R159	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R160	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R161	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R162	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R163	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R164	1-216-033-00	METAL GLAZE	220	5%	1/10W
R165	1-216-033-00	METAL GLAZE	220	5%	1/10W
R170	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R171	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R172	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R173	1-216-043-91	METAL GLAZE	560	5%	1/10W
R174	1-216-043-91	METAL GLAZE	560	5%	1/10W
R175	1-216-025-91	METAL GLAZE	100	5%	1/10W
R176	1-216-043-91	METAL GLAZE	560	5%	1/10W
R177	1-216-043-91	METAL GLAZE	560	5%	1/10W
R178	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R179	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R180	1-216-027-00	METAL GLAZE	120	5%	1/10W
R181	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R182	1-216-027-00	METAL GLAZE	120	5%	1/10W
R183	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R184	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R185	1-216-043-91	METAL GLAZE	560	5%	1/10W
R186	1-216-043-91	METAL GLAZE	560	5%	1/10W
R187	1-216-025-91	METAL GLAZE	100	5%	1/10W
R188	1-216-043-91	METAL GLAZE	560	5%	1/10W
R189	1-216-043-91	METAL GLAZE	560	5%	1/10W
R190	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R191	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R192	1-216-027-00	METAL GLAZE	120	5%	1/10W
R193	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R194	1-216-027-00	METAL GLAZE	120	5%	1/10W
R195	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R196	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R197	1-216-043-91	METAL GLAZE	560	5%	1/10W
R198	1-216-043-91	METAL GLAZE	560	5%	1/10W
R199	1-216-025-91	METAL GLAZE	100	5%	1/10W
R200	1-216-043-91	METAL GLAZE	560	5%	1/10W
R201	1-216-043-91	METAL GLAZE	560	5%	1/10W
R202	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R203	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R204	1-216-027-00	METAL GLAZE	120	5%	1/10W
R205	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R206	1-216-027-00	METAL GLAZE	120	5%	1/10W
R207	1-216-047-91	METAL GLAZE	820	5%	1/10W
R208	1-216-047-91	METAL GLAZE	820	5%	1/10W
R209	1-216-043-91	METAL GLAZE	560	5%	1/10W
R210	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R211	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R212	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R213	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R218	1-216-295-91	CONDUCTOR, CHIP			
R220	1-247-807-11	CARBON	100	5%	1/4W
R221	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R222	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R225	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R226	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R227	1-216-025-91	METAL GLAZE	100	5%	1/10W
R228	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R229	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R230	1-216-025-91	METAL GLAZE	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R231	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R232	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R236	1-216-033-00	METAL GLAZE	220	5%	1/10W
R240	1-247-843-11	CARBON	3.3K	5%	1/4W
R241	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R242	1-216-033-00	METAL GLAZE	220	5%	1/10W
R243	1-249-409-11	CARBON	220	5%	1/4W
R244	1-247-843-11	CARBON	3.3K	5%	1/4W
R245	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R246	1-216-033-00	METAL GLAZE	220	5%	1/10W
R249	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R250	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R251	1-216-033-00	METAL GLAZE	220	5%	1/10W
R261	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R262	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R263	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R264	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R301	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R302	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R303	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R304	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R305	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R306	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R307	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R308	1-216-689-11	METAL CHIP	39K	0.50%	1/10W
R309	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R310	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R311	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R312	1-216-037-00	METAL GLAZE	330	5%	1/10W
R313	1-216-037-00	METAL GLAZE	330	5%	1/10W
R314	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R315	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R316	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R317	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R318	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R319	1-216-693-11	METAL CHIP	56K	0.50%	1/10W
R320	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R321	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R322	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R323	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R324	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R325	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R326	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R327	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R328	1-216-693-11	METAL CHIP	56K	0.50%	1/10W
R329	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R330	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R331	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R332	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R333	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R334	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R335	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R336	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R337	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R338	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R339	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R340	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R341	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R342	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R343	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R344	1-216-025-91	METAL GLAZE	100	5%	1/10W
R345	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R346	1-216-692-11	METAL CHIP	51K	0.50%	1/10W
R347	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R348	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R349	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R350	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R351	1-216-073-00	METAL GLAZE	10K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R352	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R353	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R354	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R355	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R356	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R357	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R358	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R359	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R360	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R361	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R362	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R370	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R371	1-218-754-11	METAL CHIP	120K	0.50%	1/10W
R372	1-218-758-11	METAL CHIP	180K	0.50%	1/10W
R373	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R401	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R402	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R403	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R404	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R405	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R406	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R407	1-208-291-11	METAL GLAZE	4.7M	5%	1/10W
R408	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R409	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R410	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R411	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R412	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R413	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R414	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R415	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R416	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R417	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R418	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R419	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R420	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R421	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R422	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R423	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R424	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R425	1-216-697-91	METAL CHIP	82K	0.50%	1/10W
R426	1-216-699-11	METAL CHIP	100K	0.50%	1/10W
R428	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R429	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R430	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R431	1-216-025-91	METAL GLAZE	100	5%	1/10W
R432	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R433	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R434	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R435	1-216-095-00	METAL GLAZE	82K	5%	1/10W

<VARIABLE RESISTOR>

RV101	1-238-086-11	RES, ADJ CERMET 470
RV102	1-238-086-11	RES, ADJ CERMET 470
RV103	1-238-086-11	RES, ADJ CERMET 470
RV301	1-238-088-11	RES, ADJ, CERMET 2.2K
RV302	1-238-092-11	RES, ADJ CERMET 47K

<CRYSTAL>

X1	1-760-040-11	VIBRATOR, CRYSTAL

****

REF. NO.	PART NO.	DESCRIPTION			REMARK
	1-473-268-11	KEY BOARD UNIT (H2 BOARD) *****************************			
	9-908-867-01	HOLDER LED			
	9-908-869-01	KEY TOP (KNOB,POWER SWITCH)			
	9-990-891-01	BOARD, REFLECTION A			
	9-990-892-01	BOARD, DISPENSION A			

<CAPACITOR>

C111	1-104-396-11	ELECT	10MF	20%	16V

<DIODE>

D1111	9-908-868-01	DIODE TLS263P
D1112	8-719-802-17	DIODE TLY263P
D1113	8-719-802-17	DIODE TLY263P
D1114	8-719-802-17	DIODE TLY263P
D1115	8-719-802-17	DIODE TLY263P
D1116	8-719-802-17	DIODE TLY263P
D1117	8-719-802-17	DIODE TLY263P
D1118	8-719-802-17	DIODE TLY263P
D1119	8-719-802-17	DIODE TLY263P
D1120	8-719-802-17	DIODE TLY263P
D1121	8-719-802-17	DIODE TLY263P
D1122	8-719-802-17	DIODE TLY263P
D1123	8-719-802-17	DIODE TLY263P
D1124	8-719-802-17	DIODE TLY263P
D1125	8-719-802-17	DIODE TLY263P
D1126	8-719-802-17	DIODE TLY263P
D1127	8-719-802-17	DIODE TLY263P
D1130	8-719-802-17	DIODE TLY263P
D1131	8-719-802-17	DIODE TLY263P
D1132	8-719-802-17	DIODE TLY263P
D1133	8-719-802-17	DIODE TLY263P
D1134	8-719-911-19	DIODE 1SS119-25
D1135	8-719-911-19	DIODE 1SS119-25
D1136	8-719-911-19	DIODE 1SS119-25
D1137	8-719-911-19	DIODE 1SS119-25

<IC>

IC1111	9-902-229-01	IC GP1U52R

<RESISTOR>

R1111	1-247-807-11	CARBON	100	5%	1/4W
R1112	1-247-807-11	CARBON	100	5%	1/4W
R1113	1-247-879-11	CARBON	100K	5%	1/4W
R1114	1-247-879-11	CARBON	100K	5%	1/4W
R1115	1-247-879-11	CARBON	100K	5%	1/4W
R1116	1-247-879-11	CARBON	100K	5%	1/4W
R1117	1-249-408-11	CARBON	180	5%	1/4W
R1118	1-249-403-11	CARBON	68	5%	1/4W
R1119	1-249-408-11	CARBON	180	5%	1/4W
R1120	1-249-408-11	CARBON	180	5%	1/4W
R1121	1-249-408-11	CARBON	180	5%	1/4W

<SWITCH>

S1111	1-554-303-21	SWITCH, KEY BOARD (VOL +)
S1112	1-554-303-21	SWITCH, KEY BOARD (VOL -)
S1113	1-554-303-21	SWITCH, KEY BOARD (LINE1)
S1114	1-554-303-21	SWITCH, KEY BOARD (LINE2)
S1115	1-554-303-21	SWITCH, KEY BOARD (LINE3)
S1116	1-554-303-21	SWITCH, KEY BOARD (Y/C)
S1117	1-554-303-21	SWITCH, KEY BOARD (RGB)
S1119	1-554-303-21	SWITCH, KEY BOARD (MENU)
S1120	1-554-303-21	SWITCH, KEY BOARD (SELECT +)
S1121	1-554-303-21	SWITCH, KEY BOARD (SELECT -)

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

H2

REF. NO.	PART NO.	DESCRIPTION	REMARK
S1122	1-554-303-21	SWITCH, KEY BOARD (ENTER)	
S1123	1-554-303-21	SWITCH, KEY BOARD (CONTROL)	
S1124	1-554-118-00	SWITCH, PUSH (1 KEY) (POWER)	

****

MISCELLANEOUS
****

	1-202-818-00	RES, SOLID 1.0K	
	⚠1-411-381-11	COIL, DEMAGNETIZATION	
	⚠1-411-382-11	COIL, DEMAGNETIZATION	
	1-452-032-00	MAGNET,DISK ; 10mmø	
	1-452-094-00	MAGNET, ROTATABLE DISK ; 15mmø	
	⚠1-452-616-13	NECK ASSY, PICTURE TUBE (NA323)	
	⚠1-453-108-11	DC BLOCK, HIGH-VOLTAGE (HB-1000)	
	1-500-263-11	CORE, TROIDAL	
	1-500-278-11	FILTER, CLAMP (FERRITE CORE)	
	⚠1-526-813-12	INLET, AC (3P)	
	⚠1-526-981-81	CAP ASSY, HIGH-VOLTAGE	
	1-543-653-11	CORE ASSY, BEAD (DIVISION TYPE)	
	1-543-982-11	CORE, FERRITE	
	1-782-123-11	CABLE, FLEXIBLE FLAT	
	1-900-140-13	LEAD ASSY, FOCUS	
	1-900-240-46	CONNECTOR ASSY, FASTON	
	⚠8-451-455-11	DEFLECTION YOKE Y29EXCM	
	⚠8-733-845-05	PICTURE TUBE 29EXS (SD-248/PCE) (M68KUZ10X)	

****

ACCESSORIES AND PACKING MATERIALS
****

	⚠1-557-377-11	CORD, POWER (3 CORE) (200R1U)	
	⚠1-590-151-11	CORD SET, POWER (200R1E/200R1A)	
	3-170-078-01	HOLDER (B), PLUG	
	3-859-612-12	OPERATING INSTRUCTIONS	
	*4-039-570-03	CUSHION (UPPER) (ASSY)	
	*4-039-571-03	CUSHION (LOWER) (ASSY)	
	*4-058-294-01	INDIVIDUAL CARTON	
	*4-384-101-21	BAG, PROTECTION	

REMOTE COMMANDER
****

	1-475-089-11	REMOTE COMMANDER (RM-921)	
	9-900-029-01	BATTERY COVER (FOR RM-921)	

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1135-889-A	B BOARD, COMPLETE ********************** (INCLUDING B1 BOARD)			
		<CAPACITOR>			
C1	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C4	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C5	1-164-492-11	CERAMIC CHIP	0.15MF	10%	16V
C6	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C7	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C8	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C9	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C10	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C11	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C12	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C13	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C14	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C15	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C16	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C17	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C18	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C19	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C20	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C21	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C22	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C23	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C25	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C26	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C27	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C28	1-126-934-11	ELECT	220MF	20%	16V
C29	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C30	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C31	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C32	1-126-963-11	ELECT	4.7MF	20%	50V
C33	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C34	1-126-967-11	ELECT	47MF	20%	10V
C35	1-126-927-11	ELECT	2200MF	20%	10V
C36	1-126-927-11	ELECT	2200MF	20%	10V
C100	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C101	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C102	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C103	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C104	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C105	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C106	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C107	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C108	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C109	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C110	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C111	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C112	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C113	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C140	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C141	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C142	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C150	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C151	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C152	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C153	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C154	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C155	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C156	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C157	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C158	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C159	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C160	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C161	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C162	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C163	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C190	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C191	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C192	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C200	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C201	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C202	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C203	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C204	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C205	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C206	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C207	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C208	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C209	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C210	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C211	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C212	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C213	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C240	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C241	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C242	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C250	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C251	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C252	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C253	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C254	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C255	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C256	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C257	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C259	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C260	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C261	1-126-964-11	ELECT	10MF	20%	50V
C301	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C302	1-163-089-00	CERAMIC CHIP	6PF	0.5PF	50V
C317	1-107-701-11	ELECT	47MF	20%	16V
C318	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C319	1-107-701-11	ELECT	47MF	20%	16V
C320	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C321	1-107-701-11	ELECT	47MF	20%	16V
C322	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C329	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C330	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C331	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C332	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C333	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C335	1-126-960-11	ELECT	1MF	20%	50V
C336	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C337	1-109-889-11	ELECT	1MF	20%	50V
C338	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C339	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C340	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C341	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C342	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C343	1-126-967-11	ELECT	47MF	20%	16V
C344	1-126-967-11	ELECT	47MF	20%	16V
C345	1-126-967-11	ELECT	47MF	20%	16V
C346	1-126-961-11	ELECT	2.2MF	20%	50V
C347	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C348	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C349	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C350	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C351	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C352	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C353	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C354	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C355	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C356	1-126-934-11	ELECT	220MF	20%	16V

B

REF. NO.	PART NO.	DESCRIPTION			REMARK
C357	1-126-960-11	ELECT	1MF	20%	50V
C358	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C359	1-126-963-11	ELECT	4.7MF	20%	50V
C360	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C361	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C362	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C363	1-126-956-91	ELECT	0.1MF	20%	50V
C364	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C365	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C366	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C367	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C368	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C369	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C370	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C371	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C372	1-126-965-11	ELECT	22MF	20%	50V
C374	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C375	1-126-967-11	ELECT	47MF	20%	16V
C378	1-107-716-11	ELECT	33MF	20%	16V
C379	1-107-716-11	ELECT	33MF	20%	16V
C380	1-107-716-11	ELECT	33MF	20%	16V
C381	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C382	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C383	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C384	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C385	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C386	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C387	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C388	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C389	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C390	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C401	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C402	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C403	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C404	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C405	1-135-216-11	TANTAL. CHIP	10MF	20%	10V
C406	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C501	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C502	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C503	1-126-933-11	ELECT	100MF	20%	16V
C504	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C505	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C506	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C507	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C508	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C509	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C510	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C511	1-126-933-11	ELECT	100MF	20%	16V
C512	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C513	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C514	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C515	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C516	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C517	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C518	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C520	1-126-933-11	ELECT	100MF	20%	16V
C521	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C522	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C523	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C524	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C525	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C526	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C527	1-126-934-11	ELECT	220MF	20%	16V
C528	1-126-933-11	ELECT	100MF	20%	16V
C530	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C531	1-104-664-11	ELECT	47MF	20%	25V
C532	1-104-664-11	ELECT	47MF	20%	25V
C533	1-126-960-11	ELECT	1MF	20%	50V
C534	1-164-344-11	CERAMIC CHIP	0.068MF	10%	25V
C535	1-126-964-11	ELECT	10MF	20%	50V
C536	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C538	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C539	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C540	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C541	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C542	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C543	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C544	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C545	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C546	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C547	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C548	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C549	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C550	1-126-934-11	ELECT	220MF	20%	16V
C551	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C552	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C553	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C555	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C556	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C557	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C558	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C559	1-104-664-11	ELECT	47MF	20%	25V
C560	1-164-001-11	CERAMIC CHIP	0.1MF	10%	25V
C561	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C562	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C563	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C564	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C565	1-126-963-11	ELECT	4.7MF	20%	50V
C566	1-109-889-11	ELECT	1MF	20%	50V
C567	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C568	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C569	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C570	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C571	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C573	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C574	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C580	1-126-934-11	ELECT	220MF	20%	16V
C581	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C600	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C601	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C602	1-104-664-11	ELECT	47MF	20%	25V
C603	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C604	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C605	1-104-664-11	ELECT	47MF	20%	25V
C606	1-104-664-11	ELECT	47MF	20%	25V
C607	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C608	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C609	1-126-967-11	ELECT	47MF	20%	16V
C610	1-126-967-11	ELECT	47MF	20%	16V
C611	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C612	1-126-967-11	ELECT	47MF	20%	16V
C613	1-126-967-11	ELECT	47MF	20%	16V
C614	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C615	1-107-716-11	ELECT	33MF	20%	16V
C616	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C618	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C619	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C620	1-126-967-11	ELECT	47MF	20%	16V
C704	1-126-934-11	ELECT	220MF	20%	16V
C705	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C711	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C716	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C717	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C718	1-126-934-11	ELECT	220MF	20%	16V
C721	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C725	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C726	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C727	1-126-933-11	ELECT	100MF	20%	16V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C728	1-104-653-11	ELECT	220MF	20%	16V
C729	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C730	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C731	1-126-934-11	ELECT	220MF	20%	16V
C732	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C733	1-126-934-11	ELECT	220MF	20%	16V
C735	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C736	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C737	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C738	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C740	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C742	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C744	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C745	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C746	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C747	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C748	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C749	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C750	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C751	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C752	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C753	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C754	1-126-933-11	ELECT	100MF	20%	16V
C755	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C756	1-128-526-11	ELECT	100MF	20%	16V
C757	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C758	1-163-257-11	CERAMIC CHIP	180PF	5%	50V
C759	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C764	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C765	1-126-934-11	ELECT	220MF	20%	16V
C780	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C802	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C803	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C804	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C805	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C806	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C807	1-126-933-11	ELECT	100MF	20%	16V
C808	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C809	1-126-933-11	ELECT	100MF	20%	16V
C810	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C811	1-126-933-11	ELECT	100MF	20%	16V
C812	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C813	1-126-934-11	ELECT	220MF	20%	16V
C814	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C815	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C816	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C817	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C818	1-126-934-11	ELECT	220MF	20%	16V
C819	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C820	1-126-934-11	ELECT	220MF	20%	16V
C821	1-126-934-11	ELECT	220MF	20%	16V
C822	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C823	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C824	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C825	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C826	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C827	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C828	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C829	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C830	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C831	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C832	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C833	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C834	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C835	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C836	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C837	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1001	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1002	1-126-967-11	ELECT	47MF	20%	16V
C1003	1-126-967-11	ELECT	47MF	20%	16V
C1004	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1005	1-126-967-11	ELECT	47MF	20%	16V
C1006	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C1007	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1008	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C1009	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1010	1-126-964-11	ELECT	10MF	20%	50V
C1011	1-107-698-11	ELECT	10MF	20%	25V
C1012	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1013	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1014	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1015	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1016	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1017	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1018	1-126-933-11	ELECT	100MF	20%	10V
C1019	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1020	1-126-967-11	ELECT	47MF	20%	16V
C1021	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1023	1-126-967-11	ELECT	47MF	20%	16V
C1024	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1025	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1026	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1027	1-164-346-11	CERAMIC CHIP	1MF		16V
C1028	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1029	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1030	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1031	1-126-967-11	ELECT	47MF	20%	16V
C1032	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1033	1-126-967-11	ELECT	47MF	20%	16V
C1034	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1035	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1036	1-126-967-11	ELECT	47MF	20%	16V
C1037	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1038	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1039	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1040	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1041	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1042	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1043	1-126-967-11	ELECT	47MF	20%	16V
C1044	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1045	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1046	1-126-967-11	ELECT	47MF	20%	16V
C1047	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1048	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1049	1-126-964-11	ELECT	10MF	20%	50V
C1050	1-163-091-00	CERAMIC CHIP	8PF	0.25PF	50V
C1051	1-126-967-11	ELECT	47MF	20%	16V
C1052	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1053	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1054	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1055	1-126-967-11	ELECT	47MF	20%	16V
C1056	1-126-964-11	ELECT	10MF	20%	50V
C1057	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1058	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1059	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1060	1-164-346-11	CERAMIC CHIP	1MF		16V
C1061	1-126-960-11	ELECT	1MF	20%	50V
C1062	1-126-967-11	ELECT	47MF	20%	16V
C1063	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1064	1-163-241-11	CERAMIC CHIP	39PF	5%	50V
C1065	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1066	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1067	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1068	1-126-967-11	ELECT	47MF	20%	16V
C1069	1-126-967-11	ELECT	47MF	20%	16V
C1070	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C1071	1-163-243-11	CERAMIC CHIP	47PF	5%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1072	1-126-964-11	ELECT	10MF	20%	50V
C1073	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1074	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C1075	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1076	1-126-964-11	ELECT	10MF	20%	50V
C1077	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1078	1-126-960-11	ELECT	1MF	20%	50V
C1079	1-126-960-11	ELECT	1MF	20%	50V
C1080	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1081	1-126-967-11	ELECT	47MF	20%	16V
C1082	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1083	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1084	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1085	1-126-959-11	ELECT	0.47MF	20%	50V
C1086	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1087	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1088	1-126-963-11	ELECT	4.7MF	20%	50V
C1090	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C1091	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C1092	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1093	1-126-967-11	ELECT	47MF	20%	16V
C1094	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1095	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C1096	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1097	1-126-967-11	ELECT	47MF	20%	16V
C1098	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1099	1-126-967-11	ELECT	47MF	20%	16V
C1100	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1101	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1102	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1103	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C1104	1-163-145-00	CERAMIC CHIP	0.0015MF	5%	50V
C1105	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1106	1-126-963-11	ELECT	4.7MF	20%	50V
C1107	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1108	1-126-967-11	ELECT	47MF	20%	16V
C1109	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C1110	1-164-695-11	CERAMIC CHIP	0.0022MF	5%	50V
C1111	1-164-695-11	CERAMIC CHIP	0.0022MF	5%	50V
C1150	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1151	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1152	1-107-716-11	ELECT	33MF	20%	16V
C1153	1-126-967-11	ELECT	47MF	20%	16V
C1312	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

<CONNECTOR>

CN1	1-774-532-11	CONNECTOR, BOARD TO BOARD 15P
CN2	1-774-531-11	CONNECTOR, BOARD TO BOARD 10P
CN6	1-506-476-11	PIN, CONNECTOR 11P
CN8	*1-564-009-11	PIN, CONNECTOR 10P
CN9	*1-563-865-21	SOCKET, CONNECTOR 30P
CN252	1-750-628-11	SOCKET, DIN 8P

<DIODE>

REF. NO.	PART NO.	DESCRIPTION	REMARK
D1	8-719-033-86	DIODE CL-170D-CD-T	
D16	8-719-158-49	DIODE RD12SB2	
D17	8-719-158-49	DIODE RD12SB2	
D18	8-719-158-49	DIODE RD12SB2	
D19	8-719-158-49	DIODE RD12SB2	
D20	8-719-158-49	DIODE RD12SB2	
D21	8-719-158-49	DIODE RD12SB2	
D22	8-719-158-49	DIODE RD12SB2	
D23	8-719-158-49	DIODE RD12SB2	
D322	8-719-800-76	DIODE 1SS226	
D324	8-719-800-76	DIODE 1SS226	
D326	8-719-800-76	DIODE 1SS226	
D331	8-719-404-49	DIODE MA111	
D332	8-719-800-76	DIODE 1SS226	
D334	8-719-800-76	DIODE 1SS226	
D336	8-719-800-76	DIODE 1SS226	
D501	8-719-421-40	DIODE MA77	
D502	8-719-421-40	DIODE MA77	
D503	8-719-421-40	DIODE MA77	
D504	8-719-421-40	DIODE MA77	
D505	8-719-421-40	DIODE MA77	
D506	8-719-421-40	DIODE MA77	
D508	8-719-800-76	DIODE 1SS226	
D510	8-719-800-76	DIODE 1SS226	
D512	8-719-800-76	DIODE 1SS226	
D514	8-719-800-76	DIODE 1SS226	
D516	8-719-800-76	DIODE 1SS226	
D518	8-719-800-76	DIODE 1SS226	
D520	8-719-421-40	DIODE MA77	
D521	8-719-421-40	DIODE MA77	
D522	8-719-421-40	DIODE MA77	
D523	8-719-421-40	DIODE MA77	
D524	8-719-421-40	DIODE MA77	
D526	8-719-800-76	DIODE 1SS226	
D528	8-719-800-76	DIODE 1SS226	
D530	8-719-800-76	DIODE 1SS226	
D532	8-719-800-76	DIODE 1SS226	
D534	8-719-800-76	DIODE 1SS226	
D536	8-719-800-76	DIODE 1SS226	
D537	8-719-421-40	DIODE MA77	
D538	8-719-421-40	DIODE MA77	
D539	8-719-421-40	DIODE MA77	
D540	8-719-421-40	DIODE MA77	
D541	8-719-421-40	DIODE MA77	
D542	8-719-421-40	DIODE MA77	
D544	8-719-800-76	DIODE 1SS226	
D546	8-719-800-76	DIODE 1SS226	
D548	8-719-800-76	DIODE 1SS226	
D550	8-719-800-76	DIODE 1SS226	
D552	8-719-800-76	DIODE 1SS226	
D554	8-719-800-76	DIODE 1SS226	
D555	8-719-421-40	DIODE MA77	
D701	8-719-404-49	DIODE MA111	
D702	8-719-404-49	DIODE MA111	
D703	8-719-404-49	DIODE MA111	
D704	8-719-421-40	DIODE MA77	
D706	8-719-421-40	DIODE MA77	
D708	8-719-421-40	DIODE MA77	
D710	8-719-421-40	DIODE MA77	
D712	8-719-421-40	DIODE MA77	
D714	8-719-421-40	DIODE MA77	
D716	8-719-404-49	DIODE MA111	
D718	8-719-404-49	DIODE MA111	
D720	8-719-404-49	DIODE MA111	
D722	8-719-421-40	DIODE MA77	
D724	8-719-421-40	DIODE MA77	
D726	8-719-421-40	DIODE MA77	
D777	8-719-158-49	DIODE RD12SB2	
D778	8-719-158-49	DIODE RD12SB2	
D1001	8-719-988-62	DIODE 1SS355	
D1002	8-719-988-62	DIODE 1SS355	

<FERRITE BEAD>

FB1	1-414-234-11	INDUCTOR, FERRITE BEAD
FB2	1-414-234-11	INDUCTOR, FERRITE BEAD
FB3	1-414-234-11	INDUCTOR, FERRITE BEAD
FB4	1-414-234-11	INDUCTOR, FERRITE BEAD
FB5	1-414-234-11	INDUCTOR, FERRITE BEAD

REF. NO.	PART NO.	DESCRIPTION	REMARK
FB6	1-414-234-11	INDUCTOR, FERRITE BEAD	
FB7	1-414-234-11	INDUCTOR, FERRITE BEAD	
FB8	1-414-234-11	INDUCTOR, FERRITE BEAD	
FB16	1-414-234-11	INDUCTOR, FERRITE BEAD	
FB17	1-414-234-11	INDUCTOR, FERRITE BEAD	
FB18	1-414-234-11	INDUCTOR, FERRITE BEAD	
FB19	1-414-234-11	INDUCTOR, FERRITE BEAD	
FB20	1-414-234-11	INDUCTOR, FERRITE BEAD	
		<FILTER>	
FL501	1-233-554-11	FILTER, LOW PASS	
FL502	1-233-585-11	FILTER, LOW PASS	
FL503	1-233-584-11	FILTER, LOW PASS	
FL504	1-233-583-11	FILTER, LOW PASS	
FL505	1-233-582-11	FILTER, LOW PASS	
FL506	1-233-581-11	FILTER, LOW PASS	
FL507	1-233-554-11	FILTER, LOW PASS	
FL508	1-233-585-11	FILTER, LOW PASS	
FL509	1-233-584-11	FILTER, LOW PASS	
FL510	1-233-583-11	FILTER, LOW PASS	
FL511	1-233-582-11	FILTER, LOW PASS	
FL512	1-233-581-11	FILTER, LOW PASS	
FL513	1-233-554-11	FILTER, LOW PASS	
FL514	1-233-585-11	FILTER, LOW PASS	
FL515	1-233-584-11	FILTER, LOW PASS	
FL516	1-233-583-11	FILTER, LOW PASS	
FL517	1-233-582-11	FILTER, LOW PASS	
FL518	1-233-581-11	FILTER, LOW PASS	
FL701	1-233-587-11	FILTER, LOW PASS	
FL703	1-233-587-11	FILTER, LOW PASS	
FL705	1-233-587-11	FILTER, LOW PASS	
FL1001	1-239-384-11	FILTER, EMI	
FL1002	1-543-775-11	FILTER, EMI	
FL1003	1-543-775-11	FILTER, EMI	
FL1007	1-414-234-11	INDUCTOR, FERRITE BEAD	
FL1008	1-414-234-11	INDUCTOR, FERRITE BEAD	
FL1009	1-543-775-11	FILTER, EMI	
FL1010	1-543-775-11	FILTER, EMI	
FL1011	1-543-775-11	FILTER, EMI	
FL1012	1-239-847-11	FILTER, LOW PASS	
FL1013	1-239-384-11	FILTER, EMI	
FL1014	1-239-384-11	FILTER, EMI	
FL1015	1-239-847-11	FILTER, LOW PASS	
FL1016	1-239-847-11	FILTER, LOW PASS	
FL1017	1-543-775-11	FILTER, EMI	
		<IC>	
IC100	8-759-175-27	IC TC74VHC574F	
IC101	8-759-196-73	IC uPD485505G-25	
IC102	8-759-196-73	IC uPD485505G-25	
IC103	8-759-179-94	IC HM530281-20	
IC104	8-759-179-94	IC HM530281-20	
IC105	8-759-179-94	IC HM530281-20	
IC106	8-759-179-94	IC HM530281-20	
IC107	8-752-375-92	IC CXD303-105Q	
IC108	8-759-175-27	IC TC74VHC574F	
IC150	8-759-175-27	IC TC74VHC574F	
IC151	8-759-196-73	IC uPD485505G-25	
IC152	8-759-196-73	IC uPD485505G-25	
IC153	8-759-179-94	IC HM530281-20	
IC154	8-759-179-94	IC HM530281-20	
IC155	8-759-179-94	IC HM530281-20	
IC156	8-759-179-94	IC HM530281-20	
IC157	8-752-375-92	IC CXD303-105Q	
IC158	8-759-175-27	IC TC74VHC574F	
IC200	8-759-175-27	IC TC74VHC574F	
IC201	8-759-196-73	IC uPD485505G-25	
IC202	8-759-196-73	IC uPD485505G-25	
IC203	8-759-179-94	IC HM530281-20	
IC204	8-759-179-94	IC HM530281-20	
IC205	8-759-179-94	IC HM530281-20	
IC206	8-759-179-94	IC HM530281-20	
IC207	8-752-375-92	IC CXD303-105Q	
IC208	8-759-175-27	IC TC74VHC574F	
IC250	8-752-377-98	IC CXD305-114Q	
IC251	8-759-388-28	IC uPD23C8000WGX-388-E2	
IC252	8-759-449-60	IC HD6473257F10-BKM1	
IC253	8-759-162-80	IC MM1170BFB	
IC254	8-759-080-93	IC M6M80041FP	
IC255	8-759-080-93	IC M6M80041FP	
IC256	8-759-080-93	IC M6M80041FP	
IC258	8-759-252-59	IC MAX202CSE	
IC259	8-759-032-53	IC MC74HC244AF	
IC260	8-759-032-53	IC MC74HC244AF	
IC261	8-759-032-53	IC MC74HC244AF	
IC262	8-759-032-53	IC MC74HC244AF	
IC263	8-759-032-14	IC MC74HC08AF	
IC264	8-759-362-35	IC ICS9161A-01CW16T	
IC265	8-759-364-08	IC KS6369-20AP	
IC266	8-759-032-32	IC MC74HC132AF	
IC267	8-759-373-60	IC SN74ABT540NS-E05	
IC268	8-759-373-60	IC SN74ABT540NS-E05	
IC269	8-759-032-01	IC MC74HC00AF	
IC270	8-759-186-39	IC TC74VHC74F	
IC271	8-759-186-51	IC TC74VHC157F	
IC272	8-759-295-09	IC TLC2932IPW	
IC273	8-759-032-53	IC MC74HC244AF	
IC274	8-759-032-53	IC MC74HC244AF	
IC275	8-759-373-61	IC SN74ABT574NS-E05	
IC276	8-759-373-61	IC SN74ABT574NS-E05	
IC277	8-759-373-61	IC SN74ABT574NS-E05	
IC278	8-759-373-60	IC SN74ABT540NS-E05	
IC280	8-759-186-51	IC TC74VHC157F	
IC300	8-752-053-21	IC CXA1211M	
IC301	8-752-053-21	IC CXA1211M	
IC302	8-759-011-65	IC MC74HC4053F	
IC303	8-759-011-65	IC MC74HC4053F	
IC304	8-759-635-27	IC M62352GP-75E	
IC305	8-759-288-85	IC TDA4665T-T	
IC306	8-759-082-61	IC TC4W53FU	
IC317	8-759-011-64	IC MC74HC4052F	
IC318	8-759-032-11	IC MC74HC04AF	
IC319	8-759-360-07	IC BA7657F-E2	
IC321	8-759-372-18	IC uPC1830GT-E2	
IC501	8-759-011-63	IC MC74HC4051F	
IC502	8-759-635-27	IC M62352GP-75E	
IC503	8-759-637-31	IC M52036SP	
IC504	8-759-970-89	IC BA10358F	
IC505	8-752-070-09	IC CXA1779P	
IC507	8-759-007-50	IC MC74HC11F	
IC508	8-759-925-80	IC SN74HC14ANS	
IC509	8-759-198-31	IC uPC1093J-1-T	
IC510	8-759-198-31	IC uPC1093J-1-T	
IC511	8-752-371-18	IC CXD2302Q-T4	
IC512	8-752-371-18	IC CXD2302Q-T4	
IC513	8-752-371-18	IC CXD2302Q-T4	
IC514	8-759-008-40	IC MC74HC4078F	
IC515	8-759-008-40	IC MC74HC4078F	
IC516	8-759-008-40	IC MC74HC4078F	
IC517	8-759-032-53	IC MC74HC244AF	
IC518	8-759-007-56	IC MC74HC30F	
IC519	8-759-007-56	IC MC74HC30F	
IC520	8-759-007-56	IC MC74HC30F	
IC521	8-759-082-61	IC TC4W53FU	
IC522	8-759-008-45	IC MC74HC4538F	
IC703	8-759-369-85	IC BT121KPJ80	

B

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC710	8-752-070-09	IC CXA1779P	
IC711	8-759-008-45	IC MC74HC4538F	
IC712	8-759-390-38	IC uPC24M12AHF	
IC713	8-759-144-82	IC uPC2405HF	
IC714	4-623-699-01	SCREW (3X5)	
IC714	8-759-144-82	IC uPC2405HF	
IC777	8-759-442-20	IC 24LC21A/SN	
IC1001	8-752-372-78	IC CXD2024AQ	
IC1002	8-759-296-51	IC uPD6486GF-3BA	
IC1003	8-759-161-24	IC uPC659AGS-E2	
IC1004	8-759-167-20	IC uPD42280GU-30	
IC1005	8-759-167-20	IC uPD42280GU-30	
IC1006	8-759-287-89	IC MM1113XFF	
IC1007	8-759-287-89	IC MM1113XFF	
IC1008	8-759-011-65	IC MC74HC4053F	
IC1009	8-759-296-53	IC uPC1862GS-E2	
IC1010	8-759-209-57	IC TC4S69F(TE85R)	
IC1011	8-752-053-21	IC CXA1211M	
IC1012	8-759-277-63	IC TC7W14FU(TE12R)	
		<COIL>	
L201	1-410-471-11	INDUCTOR 12UH	
L302	1-410-193-51	INDUCTOR CHIP 1.2UH	
L501	1-410-471-11	INDUCTOR 12UH	
L504	1-410-471-11	INDUCTOR 12UH	
L506	1-410-471-11	INDUCTOR 12UH	
L701	1-410-471-11	INDUCTOR 12UH	
L1001	1-414-042-21	INDUCTOR 18UH	
L1002	1-414-042-21	INDUCTOR 18UH	
L1003	1-414-042-21	INDUCTOR 18UH	
L1004	1-414-042-21	INDUCTOR 18UH	
L1005	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1006	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1007	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1008	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1009	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1010	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1011	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1012	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1013	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1014	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1015	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1016	1-410-193-51	INDUCTOR CHIP 1.2UH	
L1017	1-410-204-31	INDUCTOR CHIP 10UH	
		<TRANSISTOR>	
Q1	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q215	8-729-216-22	TRANSISTOR 2SA1162-G	
Q307	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q310	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q311	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q313	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q314	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q315	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q316	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q317	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q318	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q320	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q321	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q322	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q351	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q352	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q354	8-729-027-31	TRANSISTOR DTA124EKA-T146	
Q355	8-729-216-22	TRANSISTOR 2SA1162-G	
Q356	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q357	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q358	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q501	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q502	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q503	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q504	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q505	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q506	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q507	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q508	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q509	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q510	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q511	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q512	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q513	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q514	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q515	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q516	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q517	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q518	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q519	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q520	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q521	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q522	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q523	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q524	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q525	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q526	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q527	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q528	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q529	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q530	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q531	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q532	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q533	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q534	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q535	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q536	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q537	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q538	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q539	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q540	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q541	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q542	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q543	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q544	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q545	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q546	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q547	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q548	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q549	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q550	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q551	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q552	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q553	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q554	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q555	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q556	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q557	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q558	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q559	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q560	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q561	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q562	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q563	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q564	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q565	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q566	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q567	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q568	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q569	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

REF. NO.	PART NO.	DESCRIPTION	REMARK
Q570	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q571	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q572	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q573	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q574	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q575	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q576	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q577	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q578	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q579	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q580	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q581	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q582	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q583	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q584	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q585	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q586	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q587	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q588	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q589	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q590	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q591	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q592	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q593	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q594	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q595	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q596	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q597	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q598	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q599	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q600	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q601	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q602	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q603	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q604	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q605	8-729-027-46	TRANSISTOR DTC114YKA-T146	
Q606	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q607	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q608	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q609	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q610	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q611	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q612	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q613	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q614	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q615	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q616	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q711	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q712	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q713	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q714	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q715	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q716	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q723	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q725	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q727	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q729	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q731	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q733	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q735	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q737	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q739	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q747	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q748	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q749	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q753	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q754	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q755	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1001	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1002	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1003	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q1004	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q1005	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1006	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1007	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1008	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1009	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1010	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1011	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1012	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1013	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1014	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1015	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1016	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q1017	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1018	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1019	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1020	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<RESISTOR>	
R8	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R9	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R10	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R13	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R20	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R26	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R41	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R42	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R43	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R62	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R68	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R79	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R84	1-216-659-11	METAL CHIP 2.2K 0.50% 1/10W	
R89	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R98	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R99	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R100	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R101	1-216-023-00	METAL GLAZE 82 5% 1/10W	
R102	1-216-023-00	METAL GLAZE 82 5% 1/10W	
R103	1-216-021-00	METAL GLAZE 68 5% 1/10W	
R104	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R105	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R106	1-216-021-00	METAL GLAZE 68 5% 1/10W	
R108	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R109	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R110	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R111	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R112	1-216-009-00	METAL GLAZE 22 5% 1/10W	
R113	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R114	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R115	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R116	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R117	1-216-023-00	METAL GLAZE 82 5% 1/10W	
R118	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R119	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R120	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R121	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R122	1-216-023-00	METAL GLAZE 82 5% 1/10W	
R123	1-216-009-00	METAL GLAZE 22 5% 1/10W	
R124	1-216-009-00	METAL GLAZE 22 5% 1/10W	
R125	1-216-009-00	METAL GLAZE 22 5% 1/10W	
R126	1-216-009-00	METAL GLAZE 22 5% 1/10W	
R127	1-216-009-00	METAL GLAZE 22 5% 1/10W	
R128	1-216-009-00	METAL GLAZE 22 5% 1/10W	
R129	1-216-009-00	METAL GLAZE 22 5% 1/10W	
R130	1-216-009-00	METAL GLAZE 22 5% 1/10W	
R132	1-216-023-00	METAL GLAZE 82 5% 1/10W	
R133	1-216-021-00	METAL GLAZE 68 5% 1/10W	
R135	1-216-009-00	METAL GLAZE 22 5% 1/10W	

B

REF. NO.	PART NO.	DESCRIPTION			REMARK
R136	1-216-009-00	METAL GLAZE	22	5%	1/10W
R137	1-216-009-00	METAL GLAZE	22	5%	1/10W
R138	1-216-009-00	METAL GLAZE	22	5%	1/10W
R139	1-216-009-00	METAL GLAZE	22	5%	1/10W
R141	1-216-023-00	METAL GLAZE	82	5%	1/10W
R142	1-216-009-00	METAL GLAZE	22	5%	1/10W
R143	1-216-009-00	METAL GLAZE	22	5%	1/10W
R144	1-216-009-00	METAL GLAZE	22	5%	1/10W
R145	1-216-009-00	METAL GLAZE	22	5%	1/10W
R146	1-216-009-00	METAL GLAZE	22	5%	1/10W
R148	1-216-021-00	METAL GLAZE	68	5%	1/10W
R149	1-216-009-00	METAL GLAZE	22	5%	1/10W
R150	1-216-009-00	METAL GLAZE	22	5%	1/10W
R151	1-216-009-00	METAL GLAZE	22	5%	1/10W
R153	1-216-025-91	METAL GLAZE	100	5%	1/10W
R154	1-216-009-00	METAL GLAZE	22	5%	1/10W
R156	1-216-021-00	METAL GLAZE	68	5%	1/10W
R160	1-216-013-00	METAL GLAZE	33	5%	1/10W
R161	1-216-013-00	METAL GLAZE	33	5%	1/10W
R162	1-216-013-00	METAL GLAZE	33	5%	1/10W
R163	1-216-013-00	METAL GLAZE	33	5%	1/10W
R164	1-216-013-00	METAL GLAZE	33	5%	1/10W
R165	1-216-013-00	METAL GLAZE	33	5%	1/10W
R166	1-216-009-00	METAL GLAZE	22	5%	1/10W
R167	1-216-009-00	METAL GLAZE	22	5%	1/10W
R168	1-216-009-00	METAL GLAZE	22	5%	1/10W
R169	1-216-009-00	METAL GLAZE	22	5%	1/10W
R170	1-216-023-00	METAL GLAZE	82	5%	1/10W
R171	1-216-023-00	METAL GLAZE	82	5%	1/10W
R173	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R177	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R178	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R179	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R180	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R181	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R182	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R183	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R184	1-216-025-91	METAL GLAZE	100	5%	1/10W
R185	1-216-025-91	METAL GLAZE	100	5%	1/10W
R186	1-216-025-91	METAL GLAZE	100	5%	1/10W
R187	1-216-025-91	METAL GLAZE	100	5%	1/10W
R188	1-216-025-91	METAL GLAZE	100	5%	1/10W
R189	1-216-025-91	METAL GLAZE	100	5%	1/10W
R191	1-216-025-91	METAL GLAZE	100	5%	1/10W
R192	1-216-025-91	METAL GLAZE	100	5%	1/10W
R193	1-216-025-91	METAL GLAZE	100	5%	1/10W
R194	1-216-025-91	METAL GLAZE	100	5%	1/10W
R195	1-216-025-91	METAL GLAZE	100	5%	1/10W
R196	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R197	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R198	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R199	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R200	1-216-013-00	METAL GLAZE	33	5%	1/10W
R203	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R205	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R208	1-216-699-11	METAL CHIP	100K	0.50%	1/10W
R210	1-218-756-11	METAL CHIP	150K	0.50%	1/10W
R211	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R212	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R216	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R217	1-216-689-11	METAL CHIP	39K	0.50%	1/10W
R218	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R219	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R220	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R221	1-216-692-11	METAL CHIP	51K	0.50%	1/10W
R222	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R223	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R224	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R225	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R226	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R227	1-216-686-11	METAL CHIP	30K	0.50%	1/10W
R228	1-216-031-00	METAL GLAZE	180	5%	1/10W
R232	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R235	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R236	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R237	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R238	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R239	1-216-025-91	METAL GLAZE	100	5%	1/10W
R240	1-216-295-91	CONDUCTOR, CHIP			
R241	1-216-295-91	CONDUCTOR, CHIP			
R242	1-216-295-91	CONDUCTOR, CHIP			
R243	1-216-660-11	METAL CHIP	2.4K	0.50%	1/10W
R244	1-216-660-11	METAL CHIP	2.4K	0.50%	1/10W
R245	1-216-037-00	METAL GLAZE	330	5%	1/10W
R246	1-216-295-91	CONDUCTOR, CHIP			
R247	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R248	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R249	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R250	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R251	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R252	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R253	1-216-037-00	METAL GLAZE	330	5%	1/10W
R254	1-216-295-91	CONDUCTOR, CHIP			
R255	1-216-295-91	CONDUCTOR, CHIP			
R256	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R257	1-216-660-11	METAL CHIP	2.4K	0.50%	1/10W
R258	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R259	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R260	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R261	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R262	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R263	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R264	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R265	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R266	1-216-295-91	CONDUCTOR, CHIP			
R267	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R268	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R269	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R270	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R271	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R272	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R273	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R274	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R275	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R276	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R277	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R278	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R279	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R280	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R281	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R282	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R283	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R284	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R285	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R286	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R287	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R288	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R289	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R290	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R291	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R292	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R293	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R294	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R295	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R296	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R297	1-216-073-00	METAL GLAZE	10K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R298	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R299	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R300	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R301	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R308	1-216-025-91	METAL GLAZE	100	5%	1/10W
R309	1-216-025-91	METAL GLAZE	100	5%	1/10W
R310	1-216-025-91	METAL GLAZE	100	5%	1/10W
R311	1-216-025-91	METAL GLAZE	100	5%	1/10W
R335	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R336	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R346	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R347	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R348	1-216-295-91	CONDUCTOR, CHIP			
R350	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R352	1-216-295-91	CONDUCTOR, CHIP			
R353	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R354	1-216-045-00	METAL GLAZE	680	5%	1/10W
R355	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R356	1-216-047-91	METAL GLAZE	820	5%	1/10W
R357	1-216-025-91	METAL GLAZE	100	5%	1/10W
R358	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R359	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R361	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R362	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R363	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R364	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R365	1-216-033-00	METAL GLAZE	220	5%	1/10W
R366	1-216-295-91	CONDUCTOR, CHIP			
R367	1-216-295-91	CONDUCTOR, CHIP			
R368	1-216-295-91	CONDUCTOR, CHIP			
R369	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R370	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R371	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R372	1-216-658-11	METAL CHIP	2K	0.50%	1/10W
R373	1-216-690-11	METAL CHIP	43K	0.50%	1/10W
R375	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R376	1-218-756-11	METAL CHIP	150K	0.50%	1/10W
R378	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R379	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R380	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R383	1-218-772-11	METAL CHIP	680K	0.50%	1/10W
R384	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R385	1-216-646-11	METAL CHIP	620	0.50%	1/10W
R387	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R388	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R389	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R392	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R393	1-218-775-11	METAL CHIP	910K	0.50%	1/10W
R394	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R395	1-216-295-91	CONDUCTOR, CHIP			
R396	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R399	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R400	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R404	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R405	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R406	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R407	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R408	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R409	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R411	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R412	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R413	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R414	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R415	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R416	1-216-652-11	METAL CHIP	1.1K	0.50%	1/10W
R417	1-216-652-11	METAL CHIP	1.1K	0.50%	1/10W
R436	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R437	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R438	1-216-651-11	METAL CHIP	1K	0.50%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R440	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R441	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R442	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R443	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R444	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R445	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R446	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R447	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R448	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R449	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R450	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R451	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R452	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R453	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R454	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R455	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R456	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R457	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R458	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R459	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R460	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R461	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R462	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R463	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R464	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R465	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R466	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R467	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R468	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R469	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R470	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R471	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R477	1-216-013-00	METAL GLAZE	33	5%	1/10W
R478	1-216-013-00	METAL GLAZE	33	5%	1/10W
R479	1-216-013-00	METAL GLAZE	33	5%	1/10W
R480	1-216-013-00	METAL GLAZE	33	5%	1/10W
R481	1-216-013-00	METAL GLAZE	33	5%	1/10W
R482	1-216-013-00	METAL GLAZE	33	5%	1/10W
R483	1-216-013-00	METAL GLAZE	33	5%	1/10W
R484	1-216-013-00	METAL GLAZE	33	5%	1/10W
R485	1-216-013-00	METAL GLAZE	33	5%	1/10W
R486	1-216-013-00	METAL GLAZE	33	5%	1/10W
R487	1-216-013-00	METAL GLAZE	33	5%	1/10W
R488	1-216-013-00	METAL GLAZE	33	5%	1/10W
R489	1-216-013-00	METAL GLAZE	33	5%	1/10W
R490	1-216-013-00	METAL GLAZE	33	5%	1/10W
R491	1-216-013-00	METAL GLAZE	33	5%	1/10W
R492	1-216-013-00	METAL GLAZE	33	5%	1/10W
R493	1-216-013-00	METAL GLAZE	33	5%	1/10W
R494	1-216-013-00	METAL GLAZE	33	5%	1/10W
R495	1-216-013-00	METAL GLAZE	33	5%	1/10W
R496	1-216-013-00	METAL GLAZE	33	5%	1/10W
R497	1-216-013-00	METAL GLAZE	33	5%	1/10W
R498	1-216-013-00	METAL GLAZE	33	5%	1/10W
R499	1-216-013-00	METAL GLAZE	33	5%	1/10W
R500	1-216-013-00	METAL GLAZE	33	5%	1/10W
R501	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R502	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R503	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R504	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R505	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R506	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R507	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R508	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R509	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R510	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R511	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R512	1-216-639-11	METAL CHIP	330	0.50%	1/10W

B

REF. NO.	PART NO.	DESCRIPTION			REMARK
R513	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R514	1-216-658-11	METAL CHIP	2K	0.50%	1/10W
R515	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R516	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R517	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R518	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R519	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R520	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R521	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R522	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R523	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R524	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R525	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R526	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R527	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R528	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R529	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R530	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R531	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R532	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R533	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R534	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R535	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R536	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R537	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R538	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R539	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R540	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R541	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R542	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R543	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R544	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R545	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R546	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R547	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R548	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R549	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R550	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R551	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R552	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R553	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R554	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R555	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R561	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R562	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R563	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R564	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R565	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R566	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R567	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R568	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R569	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R570	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R571	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R572	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R573	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R574	1-216-658-11	METAL CHIP	2K	0.50%	1/10W
R575	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R576	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R577	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R578	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R579	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R580	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R581	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R582	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R583	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R584	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R585	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R586	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R587	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R588	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R589	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R590	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R591	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R592	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R593	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R594	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R595	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R596	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R597	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R598	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R599	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R600	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R601	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R602	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R603	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R604	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R605	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R606	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R607	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R608	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R609	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R611	1-216-646-11	METAL CHIP	620	0.50%	1/10W
R612	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R613	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R614	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R615	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R616	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R617	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R618	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R619	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R620	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R621	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R622	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R623	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R624	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R625	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R626	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R627	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R628	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R629	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R630	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R632	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R633	1-216-658-11	METAL CHIP	2K	0.50%	1/10W
R634	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R635	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R636	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R637	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R638	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R639	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R640	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R641	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R642	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R643	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R645	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R646	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R647	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R648	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R649	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R650	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R651	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R652	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R653	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R654	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R655	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R656	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R657	1-216-675-11	METAL CHIP	10K	0.50%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R658	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R659	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R660	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R661	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R662	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R663	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R664	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R665	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R666	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R667	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R668	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R669	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R695	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R697	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R699	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R701	1-216-295-91	CONDUCTOR, CHIP			
R745	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R757	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R770	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R777	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R778	1-216-017-91	METAL GLAZE	47	5%	1/10W
R779	1-216-017-91	METAL GLAZE	47	5%	1/10W
R780	1-216-017-91	METAL GLAZE	47	5%	1/10W
R787	1-216-295-91	CONDUCTOR, CHIP			
R788	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R789	1-216-624-11	METAL CHIP	75	0.50%	1/10W
R792	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R793	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R794	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R795	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R796	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R797	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R798	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R799	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R800	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R801	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R802	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R803	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R808	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R810	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R812	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R814	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R816	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R818	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R820	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R822	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R824	1-216-639-11	METAL CHIP	330	0.50%	1/10W
R826	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R828	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R830	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R832	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R834	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R836	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R838	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R840	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R842	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R844	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W
R846	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W
R848	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W
R851	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R853	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R855	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R857	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R858	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R859	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R860	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R861	1-216-017-91	METAL GLAZE	47	5%	1/10W
R862	1-216-017-91	METAL GLAZE	47	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK	
R863	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R864	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R865	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R866	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R867	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R868	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R869	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R870	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R871	1-216-341-11	METAL OXIDE	0.22	5%	1W	F
R872	1-216-341-11	METAL OXIDE	0.22	5%	1W	F
R873	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R874	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R875	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R883	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R884	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R888	1-216-643-11	METAL CHIP	470	0.50%	1/10W	
R931	1-216-121-91	METAL GLAZE	1M	5%	1/10W	
R932	1-216-624-11	METAL CHIP	75	0.50%	1/10W	
R933	1-216-619-11	METAL CHIP	47	0.50%	1/10W	
R934	1-216-624-11	METAL CHIP	75	0.50%	1/10W	
R935	1-216-624-11	METAL CHIP	75	0.50%	1/10W	
R936	1-216-685-11	METAL CHIP	27K	0.50%	1/10W	
R937	1-216-295-91	CONDUCTOR, CHIP				
R938	1-216-685-11	METAL CHIP	27K	0.50%	1/10W	
R939	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	
R944	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R945	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R946	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R975	1-216-295-91	CONDUCTOR, CHIP				
R998	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R999	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1001	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1002	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R1003	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1004	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R1005	1-216-043-91	METAL GLAZE	560	5%	1/10W	
R1006	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1007	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R1008	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R1009	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R1010	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1011	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1012	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1013	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R1014	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1015	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1016	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1017	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1018	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	
R1019	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R1020	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R1021	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R1022	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1023	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	
R1024	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1025	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1026	1-216-017-91	METAL GLAZE	47	5%	1/10W	
R1027	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1028	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1029	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1030	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1031	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W	
R1032	1-216-650-11	METAL CHIP	910	0.50%	1/10W	
R1033	1-216-633-11	METAL CHIP	180	0.50%	1/10W	
R1034	1-216-664-11	METAL CHIP	3.6K	0.50%	1/10W	
R1035	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W	
R1036	1-216-650-11	METAL CHIP	910	0.50%	1/10W	
R1037	1-216-664-11	METAL CHIP	3.6K	0.50%	1/10W	

B

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1038	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R1039	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1040	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R1041	1-216-295-91	CONDUCTOR, CHIP			
R1042	1-216-634-11	METAL CHIP	200	0.50%	1/10W
R1043	1-216-656-11	METAL CHIP	1.6K	0.50%	1/10W
R1044	1-216-634-11	METAL CHIP	200	0.50%	1/10W
R1045	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1046	1-216-295-91	CONDUCTOR, CHIP			
R1047	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1048	1-216-664-11	METAL CHIP	3.6K	0.50%	1/10W
R1049	1-216-650-11	METAL CHIP	910	0.50%	1/10W
R1050	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R1051	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R1052	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R1053	1-216-043-91	METAL GLAZE	560	5%	1/10W
R1054	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R1055	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1056	1-216-039-00	METAL GLAZE	390	5%	1/10W
R1057	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1058	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1059	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1060	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1061	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R1062	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1063	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1064	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R1065	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R1066	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1067	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1068	1-216-043-91	METAL GLAZE	560	5%	1/10W
R1069	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R1070	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1071	1-216-043-91	METAL GLAZE	560	5%	1/10W
R1072	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1073	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1074	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1075	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1076	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1077	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R1078	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1079	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R1080	1-216-295-91	CONDUCTOR, CHIP			
R1081	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1082	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1083	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1084	1-216-033-00	METAL GLAZE	220	5%	1/10W
R1085	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1086	1-216-033-00	METAL GLAZE	220	5%	1/10W
R1087	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1088	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1089	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R1090	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1091	1-216-644-11	METAL CHIP	510	0.50%	1/10W
R1092	1-216-627-11	METAL CHIP	100	0.50%	1/10W
R1093	1-216-023-00	METAL GLAZE	82	5%	1/10W
R1094	1-216-029-00	METAL GLAZE	150	5%	1/10W
R1095	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1096	1-216-019-00	METAL GLAZE	56	5%	1/10W
R1097	1-216-009-00	METAL GLAZE	22	5%	1/10W
R1098	1-216-039-00	METAL GLAZE	390	5%	1/10W
R1099	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1100	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R1101	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1102	1-216-031-00	METAL GLAZE	180	5%	1/10W
R1103	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R1104	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1105	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1106	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1107	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1108	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1110	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1111	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1112	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1113	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1114	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1115	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1116	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1117	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1118	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1119	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1120	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1121	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1122	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1123	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1124	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1125	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1126	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1127	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1128	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1129	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1130	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1131	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1132	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1133	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1134	1-216-607-11	METAL CHIP	15	0.50%	1/10W
R1135	1-216-625-11	METAL CHIP	82	0.50%	1/10W
R1140	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1141	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1142	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1143	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1144	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1145	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1146	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1147	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1148	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1149	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1150	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1151	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1152	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1153	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1154	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1155	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1156	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1157	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1158	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1159	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1160	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1161	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1162	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1163	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1164	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1165	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1166	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1167	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1168	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1169	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1170	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1171	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1175	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R1176	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R1200	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1201	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R1202	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R1203	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R1204	1-216-687-11	METAL CHIP	33K	0.50%	1/10W
R1205	1-216-681-11	METAL CHIP	18K	0.50%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1206	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1207	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1211	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R1212	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R1213	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1214	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R1215	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1216	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1217	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1218	1-216-073-00	METAL GLAZE	10K	5&	1/10W
R1219	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R1220	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R1221	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R1222	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R1223	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1224	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1225	1-216-682-11	METAL CHIP	20K	0.50%	1/10W
R1226	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1227	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1228	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1229	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1230	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1231	1-216-033-00	METAL GLAZE	220	5%	1/10W
R1232	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1233	1-216-001-00	METAL GLAZE	10	5%	1/10W
R1239	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1240	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1241	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R1349	1-216-021-00	METAL GLAZE	68	5%	1/10W
R1350	1-216-021-00	METAL GLAZE	68	5%	1/10W
R1351	1-216-021-00	METAL GLAZE	68	5%	1/10W
R1352	1-216-017-91	METAL GLAZE	47	5%	1/10W
R1353	1-216-017-91	METAL GLAZE	47	5%	1/10W

<TEST PIN>

REF. NO.	PART NO.	DESCRIPTION
TP1	1-535-757-11	CHIP, CHECKER
TP2	1-535-757-11	CHIP, CHECKER
TP3	1-535-757-11	CHIP, CHECKER
TP4	1-535-757-11	CHIP, CHECKER
TP5	1-535-757-11	CHIP, CHECKER
TP6	1-535-757-11	CHIP, CHECKER
TP7	1-535-757-11	CHIP, CHECKER
TP8	1-535-757-11	CHIP, CHECKER
TP9	1-535-757-11	CHIP, CHECKER
TP10	1-535-757-11	CHIP, CHECKER
TP11	1-535-757-11	CHIP, CHECKER
TP12	1-535-757-11	CHIP, CHECKER
TP13	1-535-757-11	CHIP, CHECKER
TP14	1-535-757-11	CHIP, CHECKER
TP71	1-535-757-11	CHIP, CHECKER
TP72	1-535-757-11	CHIP, CHECKER
TP73	1-535-757-11	CHIP, CHECKER
TP101	1-535-757-11	CHIP, CHECKER
TP102	1-535-757-11	CHIP, CHECKER
TP103	1-535-757-11	CHIP, CHECKER
TP104	1-535-757-11	CHIP, CHECKER
TP105	1-535-757-11	CHIP, CHECKER
TP106	1-535-757-11	CHIP, CHECKER
TP107	1-535-757-11	CHIP, CHECKER
TP109	1-535-757-11	CHIP, CHECKER
TP111	1-535-757-11	CHIP, CHECKER
TP112	1-535-757-11	CHIP, CHECKER
TP200	1-535-757-11	CHIP, CHECKER
TP301	1-535-757-11	CHIP, CHECKER
TP302	1-535-757-11	CHIP, CHECKER
TP303	1-535-757-11	CHIP, CHECKER
TP304	1-535-757-11	CHIP, CHECKER
TP305	1-535-757-11	CHIP, CHECKER
TP306	1-535-757-11	CHIP, CHECKER
TP307	1-535-757-11	CHIP, CHECKER
TP501	1-535-757-11	CHIP, CHECKER
TP502	1-535-757-11	CHIP, CHECKER
TP503	1-535-757-11	CHIP, CHECKER
TP701	1-535-757-11	CHIP, CHECKER
TP702	1-535-757-11	CHIP, CHECKER
TP703	1-535-757-11	CHIP, CHECKER
TP715	1-535-757-11	CHIP, CHECKER
TP716	1-535-757-11	CHIP, CHECKER
TP717	1-535-757-11	CHIP, CHECKER
TP718	1-535-757-11	CHIP, CHECKER
TP719	1-535-757-11	CHIP, CHECKER
TP1001	1-535-757-11	CHIP, CHECKER

<CRYSTAL>

REF. NO.	PART NO.	DESCRIPTION
X250	1-760-040-11	VIBRATOR, CRYSTAL
X251	1-527-722-00	VIBRATOR, CRYSTAL
X301	1-577-611-11	OSCILALTOR, CERAMIC
X302	1-567-504-11	OSCILLATOR, CRYSTAL
X303	1-567-505-11	OSCILLATOR, CRYSTAL
X1001	1-579-057-11	VIBRATOR, CRYSTAL
X1002	1-527-722-00	VIBRATOR, CRYSTAL
X1003	1-577-611-11	OSCILALTOR, CERAMIC
X1004	1-579-583-11	VIBRATOR, CERAMIC

****

*A-1131-253-A B1 BOARD, COMPLETE

****

<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1001	1-126-967-11	ELECT	47MF	20%	16V
C1002	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1003	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1004	1-126-967-11	ELECT	47MF	20%	16V
C1005	1-126-967-11	ELECT	47MF	20%	16V
C1006	1-126-967-11	ELECT	47MF	20%	16V
C1007	1-126-967-11	ELECT	47MF	20%	16V
C1008	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1009	1-126-967-11	ELECT	47MF	20%	16V
C1010	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1011	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1012	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1013	1-126-964-11	ELECT	10MF	20%	50V
C1014	1-126-964-11	ELECT	10MF	20%	50V

<CONNECTOR>

REF. NO.	PART NO.	DESCRIPTION
CN1001	*1-506-602-11	PLUG, L TYPE (2.0MM PITCH) 5P
CN1002	*1-506-602-11	PLUG, L TYPE (2.0MM PITCH) 5P

<IC>

REF. NO.	PART NO.	DESCRIPTION
IC1001	8-759-168-19	IC TA78L09F-TE12L
IC1002	8-752-037-15	IC CXA1387S

<TRANSISTOR>

REF. NO.	PART NO.	DESCRIPTION
Q1001	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R

<RESISTOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1001	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1002	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R1003	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1004	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1005	1-216-672-11	METAL CHIP	7.5K	0.50%	1/10W

B1 G2

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1006	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R1007	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R1008	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1009	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R1010	1-216-676-11	METAL CHIP	11K	0.50%	1/10W
R1011	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W
R1012	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R1013	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W

****

*A-1311-540-A G2 BOARD, COMPLETE
****

4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C600	⚠1-137-525-11	FILM	0.1MF	20%	275V
C601	⚠1-104-708-11	FILM	0.47MF	20%	275V
C602	⚠1-113-915-11	CERAMIC	0.001MF	20%	250V
C603	⚠1-113-915-11	CERAMIC	0.001MF	20%	250V
C604	1-125-533-11	ELECT(BLOCK)	100MF	20%	400V
C605	1-162-117-00	CERAMIC	100PF	10%	500V
C606	1-162-117-00	CERAMIC	100PF	10%	500V
C607	1-136-169-00	FILM	0.22MF	5%	50V
C608	1-136-169-00	FILM	0.22MF	5%	50V
C609	1-136-165-00	FILM	0.1MF	5%	50V
C610	1-136-165-00	FILM	0.1MF	5%	50V
C611	1-162-117-00	CERAMIC	100PF	10%	500V
C612	⚠1-115-348-81	FILM	0.0056MF	2%	630V
C650	1-126-960-11	ELECT	1MF	20%	50V
C651	1-164-344-11	CERAMIC CHIP	0.068MF	10%	25V
C652	1-163-143-00	CERAMIC CHIP	0.0012MF	5%	50V
C653	1-107-874-11	ELECT	10000MF	20%	6.3V
C654	1-107-877-11	ELECT	1000MF	20%	10V
C655	1-126-927-11	ELECT	2200MF	20%	10V
C656	1-126-926-11	ELECT	1000MF	20%	10V
C657	1-107-914-11	ELECT	1000MF	20%	25V
C658	1-104-664-11	ELECT	47MF	20%	25V
C661	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C662	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C663	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C664	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C670	1-104-664-11	ELECT	47MF	20%	25V
C671	1-104-664-11	ELECT	47MF	20%	25V
C680	1-126-960-11	ELECT	1MF	20%	50V

<CONNECTOR>

CN601	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P
CN602	1-506-476-11	PIN, CONNECTOR 11P
CN603	1-506-467-11	PIN, CONNECTOR 2P

<DIODE>

D601	8-719-045-35	DIODE S1WB60B-S-TR
D602	8-719-045-99	DIODE UDZ-TE-17-2.2B
D603	8-719-045-99	DIODE UDZ-TE-17-2.2B
D604	8-719-404-49	DIODE MA111
D605	8-719-045-99	DIODE UDZ-TE-17-2.2B
D606	8-719-045-99	DIODE UDZ-TE-17-2.2B
D607	8-719-404-49	DIODE MA111
D651	8-719-048-60	DIODE F10P03QL
D652	8-719-510-13	DIODE D10SC4MR
D653	8-719-510-02	DIODE D1NS4
D654	8-719-510-02	DIODE D1NS4
D655	8-719-160-68	DIODE RD18FB2
D671	8-719-051-01	DIODE CL-170HR-CD-T

REF. NO.	PART NO.	DESCRIPTION	REMARK
D672	8-719-053-31	DIODE CL-170YG-CD-T	
D673	8-719-404-49	DIODE MA111	

<FUSE>

F601	⚠1-576-228-11	FUSE (H.B.C.)
	1-533-223-11	CLIP, FUSE ; F601
	*4-052-843-01	COVER, FUSE ; F601

<FERRITE BEAD>

FB601	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB602	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB603	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH

<IC>

IC650	8-759-198-31	IC uPC1093J-1-T
IC670	8-759-100-93	IC uPC393G2
IC671	8-759-144-82	IC uPC2405HF
IC672	8-759-346-27	IC LM45BIM3X

<COIL>

L651	1-414-158-11	INDUCTOR 2.2UH
L652	1-412-523-41	INDUCTOR 6.8UH
L653	1-412-523-41	INDUCTOR 6.8UH

<TRANSISTOR>

Q601	8-729-026-13	TRANSISTOR 2SC4833S-P2
Q602	8-729-026-13	TRANSISTOR 2SC4833S-P2
Q650	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R
Q660	8-729-019-42	TRANSISTOR 2SK2084STL
Q661	8-729-019-42	TRANSISTOR 2SK2084STL
Q662	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R
Q663	8-729-824-34	TRANSISTOR 2SJ187
Q664	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R
Q670	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R
Q671	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q672	8-729-120-28	TRANSISTOR 2SC1623-L5L6

<RESISTOR>

R600	⚠1-202-846-00	SOLID	470K	20%	1/2W	
R601	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R602	1-220-318-11	METAL GLAZE	270K	5%	1/4W	
R603	1-220-318-11	METAL GLAZE	270K	5%	1/4W	
R604	1-220-318-11	METAL GLAZE	270K	5%	1/4W	
R605	1-220-318-11	METAL GLAZE	270K	5%	1/4W	
R606	1-220-233-11	METAL GLAZE	3.9	10%	1/4W	
R607	1-220-233-11	METAL GLAZE	3.9	10%	1/4W	
R610	⚠1-212-942-00	FUSIBLE	2.2	5%	1/2W	F
R650	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R651	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R655	1-216-097-91	METAL GLAZE	100K	5%	1/10W	
R656	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R657	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R658	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R659	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R661	1-219-116-11	RES, META PLATE	0.01			
R662	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R663	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R664	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R665	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R666	1-207-616-00	WIREWOUND	0.47	10%	2W	F
R667	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R668	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R669	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF. NO.	PART NO.	DESCRIPTION				REMARK
R670	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R671	1-216-393-00	WIREWOUND	2.2	10%	2W	F
R672	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R673	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R674	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R676	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R677	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R678	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R679	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R680	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R681	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R682	1-216-025-91	METAL GLAZE	100	5%	1/10W	
R683	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R684	1-216-049-91	METAL GLAZE	1K	5%	1/10W	
R685	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R686	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R687	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R688	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R690	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R691	1-216-049-91	METAL GLAZE	1K	5%	1/10W	

<TRANSFORMER>

T601	⚠1-424-117-11	FILTER, LINE
T602	⚠1-427-864-13	TRANSFORMER, CONVERTER (PRT)
T603	⚠1-429-291-11	TRANSFORMER, CONVERTER (PIT)

<VARISTOR>

VDR601	⚠1-810-974-21	VARISTOR

****

* A-1372-296-A H1 BOARD, COMPLETE
****

<CONNECTOR>

CN801	1-564-002-11	PIN, CONNECTOR 3P
CN802	*1-564-009-11	PIN, CONNECTOR 10P
CN803	1-569-922-11	SOCKET, CONNECTOR 30P
CN804	1-774-523-11	PIN, CONNECTOR (PC BOARD) 64P

****

* A-1373-596-A UJ BOARD, COMPLETE
****

<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION			REMARK
C901	1-126-786-11	ELECT	47MF	20%	16V
C902	1-126-786-11	ELECT	47MF	20%	16V
C903	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C904	1-126-791-11	ELECT	10MF	20%	16V
C905	1-126-791-11	ELECT	10MF	20%	16V
C906	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C907	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C908	1-126-786-11	ELECT	47MF	20%	16V
C909	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C910	1-126-786-11	ELECT	47MF	20%	16V
C911	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C912	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C913	1-126-786-11	ELECT	47MF	20%	16V
C914	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C915	1-126-786-11	ELECT	47MF	20%	16V
C921	1-126-786-11	ELECT	47MF	20%	16V
C922	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C923	1-126-786-11	ELECT	47MF	20%	16V
C924	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C925	1-126-786-11	ELECT	47MF	20%	16V
C926	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C927	1-107-714-11	ELECT	10MF	20%	16V
C928	1-107-701-11	ELECT	47MF	20%	16V
C929	1-126-791-11	ELECT	10MF	20%	16V
C930	1-126-791-11	ELECT	10MF	20%	16V
C931	1-126-786-11	ELECT	47MF	20%	16V
C932	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C933	1-126-786-11	ELECT	47MF	20%	16V
C934	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C935	1-126-786-11	ELECT	47MF	20%	16V
C936	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C937	1-107-714-11	ELECT	10MF	20%	16V
C938	1-107-701-11	ELECT	47MF	20%	16V
C939	1-126-791-11	ELECT	10MF	20%	16V
C940	1-126-791-11	ELECT	10MF	20%	16V
C941	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C951	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C952	1-126-786-11	ELECT	47MF	20%	16V
C953	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C971	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C972	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C973	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C974	1-126-786-11	ELECT	47MF	20%	16V
C991	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

<CONNECTOR>

CN901	1-506-482-11	PIN, CONNECTOR 3P
CN902	1-774-553-11	CONNECTOR, BOARD TO BOARD 15P
CN903	1-774-552-11	CONNECTOR, BOARD TO BOARD 10P

<DIODE>

D901	8-719-402-16	DIODE MA3100-TX
D902	8-719-402-16	DIODE MA3100-TX
D903	8-719-402-16	DIODE MA3100-TX
D904	8-719-402-16	DIODE MA3100-TX
D905	8-719-402-16	DIODE MA3100-TX
D921	8-719-800-76	DIODE 1SS226
D922	8-719-800-76	DIODE 1SS226
D923	8-719-800-76	DIODE 1SS226
D926	8-719-402-16	DIODE MA3100-TX
D927	8-719-402-16	DIODE MA3100-TX
D928	8-719-800-76	DIODE 1SS226
D929	8-719-800-76	DIODE 1SS226
D930	8-719-800-76	DIODE 1SS226
D933	8-719-402-16	DIODE MA3100-TX
D934	8-719-402-16	DIODE MA3100-TX
D940	8-719-976-96	DIODE DTZ4.7C
D941	8-719-976-96	DIODE DTZ4.7C
D942	8-719-976-96	DIODE DTZ4.7C
D943	8-719-976-96	DIODE DTZ4.7C
D944	8-719-976-96	DIODE DTZ4.7C
D945	8-719-976-96	DIODE DTZ4.7C
D946	8-719-976-96	DIODE DTZ4.7C
D947	8-719-976-96	DIODE DTZ4.7C
D999	*4-348-208-00	HOLDER, LED
D999	8-719-812-43	DIODE TLG124A

<IC>

IC901	8-759-358-46	IC MM1114XFBE
IC902	8-759-358-46	IC MM1114XFBE
IC903	8-759-446-66	IC MM1113XFBE
IC904	8-759-446-66	IC MM1113XFBE
IC905	8-759-360-07	IC BA7657F-E2

REF. NO.	PART NO.	DESCRIPTION	REMARK
IC906	8-759-011-64	IC MC74HC4052F	
		<JACK>	
J901	1-694-255-11	TERMINAL BOARD ASSY, I/O	
J903	1-569-578-11	TERMINAL, S (WITH SW)	
J905	1-694-254-11	TERMINAL BOARD ASSY, I/O	
		<TRANSISTOR>	
Q901	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q902	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q903	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q904	8-729-027-59	TRANSISTOR DTC144EKA-T146	
		<RESISTOR>	
R901	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R902	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R903	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R904	1-216-624-11	METAL CHIP 75 0.50% 1/10W	
R905	1-216-624-11	METAL CHIP 75 0.50% 1/10W	
R906	1-216-624-11	METAL CHIP 75 0.50% 1/10W	
R907	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R909	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R911	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R912	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R913	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R914	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R915	1-216-624-11	METAL CHIP 75 0.50% 1/10W	
R916	1-216-624-11	METAL CHIP 75 0.50% 1/10W	
R917	1-216-624-11	METAL CHIP 75 0.50% 1/10W	
R918	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R919	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R921	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R922	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R924	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R926	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R928	1-216-624-11	METAL CHIP 75 0.50% 1/10W	
R929	1-216-624-11	METAL CHIP 75 0.50% 1/10W	
R930	1-216-624-11	METAL CHIP 75 0.50% 1/10W	
R931	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R932	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R934	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R935	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R937	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R939	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
R941	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
R942	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
R943	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R944	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R945	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R946	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R947	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R948	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R949	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R950	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R951	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R952	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R971	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R975	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R981	1-247-863-11	CARBON 22K 5% 1/4W	
R982	1-247-863-11	CARBON 22K 5% 1/4W	
R985	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R986	1-216-025-91	METAL GLAZE 100 5% 1/10W	

`*************************************************************`

REF. NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANEOUS *****************	
	1-500-263-11	CORE, TROIDAL	
	1-543-827-11	CLAMP, SLEEVE FERRITE	
	1-698-756-11	MOTOR, DC FAN	
	1-782-122-11	CABLE, FLEXIBLE FLAT	

`*************************************************************`

REF. NO.	PART NO.	DESCRIPTION	REMARK
	ACCESSORIES AND PACKING MATERIALS **		
	*3-703-720-00	LABEL(A)(TYPE 5), MODEL NAME	
	*3-704-295-01	BAG (STANDARD), PROTECTION	
	3-859-608-01	OPERATING INSTRUCTIONS	
	3-859-609-11	MANUAL, INSTRUCTION	
	*4-058-747-01	INDIVIDUAL CARTON	
	7-682-564-09	SCREW +B 4X14	

BKM-202FN

REF. NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANEOUS *******************	
	1-541-449-41	FAN, DC (WITH SENSOR)	

****

REF. NO.	PART NO.	DESCRIPTION	REMARK
	ACCESSORIES AND PACKING MATERIALS ***		
	3-859-610-01	OPERATING INSTRUCTIONS	
	3-859-611-01	OPERATING INSTRUCTION	
	*4-058-697-01	INDIVIDUAL CARTON	
	7-682-247-09	SCREW +RK 3X6	

SS-X7A

REF. NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANEOUS *******************	
	1-505-642-11	SPEAKER UNIT	

****

REF. NO.	PART NO.	DESCRIPTION	REMARK
	ACCESSORIES AND PACKING MATERIALS ***		
	X-4374-104-1	SCREW (B) ASSY, ORNAMENTAL	
	1-782-346-11	CORD, SPEAKER CONNECTION	
	3-859-708-01	MANUAL, INSTRUCTION	
	*4-058-336-01	INDIVIDUAL CARTON	
	4-058-744-01	PARTITION	